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<210> 2972

<211> 632

<212> PRT

<213> Homo sapiens

<400> 2972

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          20          25          30
Lys Lys Met Lys Arg Lys Phe Tyr Ser Trp Glu Glu Cys Met Asn Leu
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Arg Glu Val Lys Ser Leu Lys Lys Leu Asn His Ala Asn Val Val Lys
          50          55          60
Leu Lys Glu Val Ile Arg Glu Asn Asp His Leu Tyr Phe Ile Phe Glu
65          70          75          80
Tyr Met Lys Glu Asn Leu Tyr Gln Leu Ile Lys Glu Arg Asn Lys Leu
          85          90          95
Phe Pro Glu Ser Ala Ile Arg Asn Ile Met Tyr Gln Ile Leu Gln Gly
          100          105          110
Leu Ala Phe Ile His Lys His Gly Phe Phe His Arg Asp Leu Lys Pro
          115          120          125
Glu Asn Leu Leu Cys Met Gly Pro Glu Leu Val Lys Ile Ala Asp Phe
          130          135          140
Gly Leu Ala Arg Glu Ile Arg Ser Lys Pro Pro Tyr Thr Asp Tyr Val
145          150          155          160
Ser Thr Arg Trp Tyr Arg Ala Pro Glu Val Leu Leu Arg Ser Thr Asn
          165          170          175
Tyr Ser Ser Pro Ile Asp Val Trp Ala Val Gly Cys Ile Met Ala Glu
          180          185          190
Val Tyr Thr Leu Arg Pro Leu Phe Pro Gly Ala Ser Glu Ile Asp Thr
          195          200          205
Ile Phe Lys Ile Cys Gln Val Leu Gly Thr Pro Lys Lys Thr Asp Trp
          210          215          220
Pro Glu Gly Tyr Gln Leu Ser Ser Ala Met Asn Phe Arg Trp Pro Gln
225          230          235          240
Cys Val Pro Asn Asn Leu Lys Thr Leu Ile Pro Asn Ala Ser Ser Glu
          245          250          255
Ala Val Gln Leu Leu Arg Asp Met Leu Gln Trp Asp Pro Lys Lys Arg
          260          265          270
Pro Thr Ala Ser Gln Ala Leu Arg Tyr Pro Tyr Phe Gln Val Gly His
          275          280          285
Pro Leu Gly Ser Thr Thr Gln Asn Leu Gln Asp Ser Glu Lys Pro Gln
          290          295          300
Lys Gly Ile Leu Glu Lys Ala Gly Pro Pro Pro Tyr Ile Lys Pro Val
305          310          315          320
Pro Pro Ala Gln Pro Pro Ala Lys Pro His Thr Arg Ile Ser Ser Arg
          325          330          335
Gln His Gln Ala Ser Gln Pro Pro Leu His Leu Thr Tyr Pro Tyr Lys
          340          345          350
Ala Glu Val Ser Arg Thr Asp His Pro Ser His Leu Gln Glu Asp Lys
          355          360          365
Pro Ser Pro Leu Leu Phe Pro Ser Leu His Asn Lys His Pro Gln Ser
          370          375          380
Lys Ile Thr Ala Gly Leu Glu His Lys Asn Gly Glu Ile Lys Pro Lys
385          390          395          400
Ser Arg Arg Arg Trp Gly Leu Ile Ser Arg Ser Thr Lys Asp Ser Asp

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405 410 415
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 420 425 430
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 435 440 445
 Phe Glu Ser Val Leu Asp Leu Lys Pro Ser Glu Pro Val Gly Thr Gly
 450 455 460
 Asn Ser Ala Pro Thr Gln Thr Ser Tyr Gln Arg Arg Asp Thr Pro Thr
 465 470 475 480
 Leu Arg Ser Ala Ala Lys Gln His Tyr Leu Lys His Ser Arg Tyr Leu
 485 490 495
 Pro Gly Ile Ser Ile Arg Asn Gly Ile Leu Ser Asn Pro Gly Lys Glu
 500 505 510
 Phe Ile Pro Pro Asn Pro Trp Ser Ser Ser Gly Leu Ser Gly Lys Ser
 515 520 525
 Ser Gly Thr Met Ser Val Ile Ser Lys Val Asn Ser Val Gly Ser Ser
 530 535 540
 Ser Thr Ser Ser Ser Gly Leu Thr Gly Asn Tyr Val Pro Ser Phe Leu
 545 550 555 560
 Lys Lys Glu Ile Gly Ser Ala Met Gln Arg Val His Leu Ala Pro Ile
 565 570 575
 Pro Asp Pro Ser Pro Gly Tyr Ser Ser Leu Lys Ala Met Arg Pro His
 580 585 590
 Pro Gly Arg Pro Phe Phe His Thr Gln Pro Arg Ser Thr Pro Gly Leu
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<210> 2973
 <211> 858
 <212> DNA
 <213> Homo sapiens

<400> 2973
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 180
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 240
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 300
 gtttctggaa agatccaaag gagtaaattg cgaagtcagg agtgggggaa atgaggtgca
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 420
 gtcccatgg ggagcatcat ctcttcgacc ctaaagatgt caaaggtgtg cagcttccaa
 480
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 720
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<210> 2974

<211> 117

<212> PRT

<213> Homo sapiens

<400> 2974

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Ser	Tyr	Arg	Ile	Gly	Pro	Val	Glu	Val	Glu	Ser	Ala	Leu	Ala	Glu	His
			20					25					30		
Pro	Ala	Val	Leu	Glu	Ser	Ala	Val	Val	Ser	Ser	Pro	Asp	Pro	Ile	Arg
		35					40					45			
Gly	Glu	Val	Val	Lys	Ala	Phe	Ile	Val	Leu	Thr	Pro	Ala	Tyr	Ser	Ser
	50					55					60				
His	Asp	Pro	Glu	Ala	Leu	Thr	Arg	Glu	Leu	Gln	Glu	His	Val	Lys	Arg
65					70				75					80	
Val	Thr	Ala	Pro	Tyr	Lys	Thr	Pro	Arg	Lys	Val	Ala	Phe	Val	Ser	Glu
				85					90					95	
Leu	Pro	Lys	Thr	Val	Ser	Gly	Lys	Ile	Gln	Arg	Ser	Lys	Leu	Arg	Ser
			100					105						110	
Gln	Glu	Trp	Gly	Lys											
			115												

<210> 2975

<211> 1425

<212> DNA

<213> Homo sapiens

<400> 2975

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 120
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 agagatgctg agctgccgaa gaagcgtatg ggggaagtcaa accccggctg ggagaacttg
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 360

gactggagga tcttgtaccc agagattccc cgtaagctcc gagagctgga agccgagggc
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 480
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 720
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 1320
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<210> 2976

<211> 328

<212> PRT

<213> Homo sapiens

<400> 2976

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 35 40 45
 Pro Pro Gly Thr Pro Leu Val Ser Gln Asp Glu Lys Arg Asp Ala Glu
 50 55 60
 Leu Pro Lys Lys Arg Met Gly Lys Ser Asn Pro Gly Trp Glu Asn Leu
 65 70 75 80
 Glu Lys Leu Leu Val Phe Thr Ala Ala Gly Val Lys Pro Gly Xaa Lys

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<210> 2977
<211> 1420
<212> DNA
<213> Homo sapiens
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2212

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<210> 2978

<211> 369

<212> PRT

<213> Homo sapiens

<400> 2978

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Ala	Gly	Asp	Ala	Gly	Thr	Tyr	His	Cys	Thr	Ala	Ala	Glu	Trp	Ile	Gln
		20						25					30		
Asp	Pro	Asp	Gly	Ser	Trp	Ala	Gln	Ile	Ala	Glu	Lys	Arg	Ala	Val	Leu
		35				40						45			
Ala	His	Val	Asp	Val	Gln	Thr	Leu	Ser	Ser	Gln	Leu	Ala	Val	Thr	Val
	50				55						60				
Gly	Pro	Gly	Glu	Arg	Arg	Ile	Gly	Pro	Gly	Glu	Pro	Leu	Glu	Leu	Leu
65				70						75				80	
Cys	Asn	Val	Ser	Gly	Ala	Leu	Pro	Pro	Ala	Gly	Arg	His	Ala	Ala	Tyr
				85					90					95	
Ser	Val	Gly	Trp	Glu	Met	Ala	Pro	Ala	Gly	Ala	Pro	Gly	Pro	Gly	Arg
			100					105					110		
Leu	Val	Ala	Gln	Leu	Asp	Thr	Glu	Gly	Val	Gly	Ser	Leu	Xaa	Ala	Leu

115	120	125
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130	135	140
Tyr Arg Leu Arg Leu Glu Ala Ala Arg Pro Gly Asp Ala Gly Thr Tyr		
145	150	155
Arg Cys Leu Ala Lys Ala Tyr Val Arg Gly Ser Gly Thr Arg Leu Arg		
165	170	175
Glu Ala Ala Ser Ala Arg Ser Arg Pro Leu Pro Val His Val Arg Glu		
180	185	190
Glu Gly Val Val Leu Glu Ala Val Ala Trp Leu Ala Gly Gly Thr Val		
195	200	205
Tyr Arg Gly Glu Thr Ala Ser Leu Leu Cys Asn Ile Ser Val Arg Gly		
210	215	220
Gly Pro Pro Gly Leu Arg Leu Ala Ala Ser Trp Trp Val Glu Arg Pro		
225	230	235
Glu Asp Gly Glu Leu Ser Ser Val Pro Ala Gln Leu Val Gly Gly Val		
245	250	255
Gly Gln Asp Gly Val Ala Glu Leu Gly Val Arg Pro Gly Gly Gly Pro		
260	265	270
Val Ser Val Glu Leu Val Gly Pro Arg Ser His Arg Leu Arg Leu His		
275	280	285
Ser Leu Gly Pro Glu Asp Glu Gly Val Tyr His Cys Ala Pro Ser Ala		
290	295	300
Trp Val Gln His Ala Asp Tyr Ser Trp Tyr Gln Ala Gly Ser Ala Arg		
305	310	315
Ser Gly Pro Val Thr Val Tyr Pro Tyr Met His Ala Leu Asp Thr Leu		
325	330	335
Phe Val Pro Leu Leu Val Gly Thr Gly Val Ala Leu Val Thr Gly Ala		
340	345	350
Thr Val Leu Gly Thr Ile Thr Cys Cys Phe Met Lys Arg Leu Arg Lys		
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Arg

<210> 2979
 <211> 2191
 <212> DNA
 <213> Homo sapiens

<400> 2979
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 120
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 180
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 240
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 300
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 360
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 420

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720
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780
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1500
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<210> 2980

<211> 140

<212> PRT

<213> Homo sapiens

<400> 2980

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Leu	Leu	Val	Gly	Pro	Leu	Gln	Pro	Val	Gly	Lys	Pro	Ala	Arg	Leu	Leu
			20					25					30		
Gly	Thr	Glu	His	Gly	Gln	Pro	Phe	Ala	Arg	Gly	Trp	Gly	Ala	Trp	Gly
		35					40					45			
Asn	Ala	Arg	Arg	Ala	Arg	Val	Gly	Arg	Ala	Glu	Cys	Leu	Leu	Ser	Gly
	50					55				60					
Arg	Pro	Pro	Thr	Ala	Val	Leu	Pro	Arg	Leu	Val	Glu	Asn	Leu	Lys	Ala
65					70					75				80	
Arg	Val	Pro	Val	Pro	Gly	His	Thr	Glu	Pro	Leu	Trp	Ser	Glu	Gly	Thr
				85					90					95	
Ala	Pro	Gly	Gln	Gly	Leu	Trp	Ser	His	Ala	Pro	Ala	Asp	Gly	Ser	Leu
			100				105						110		
Met	Asn	Leu	Ile	Arg	Thr	Leu	Val	Gly	Ala	Val	Val	Phe	Glu	Leu	Leu
		115					120						125		
Ser	Met	Cys	Phe	Gly	Asp	Gly	Ala	Gly	Ala	Ala	Cys				
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<210> 2981

<211> 617

<212> DNA

<213> Homo sapiens

<400> 2981

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 420
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 480

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 617

<210> 2982
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 2982
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 His Ser Ser Ser Glu Glu Ser Thr Lys Arg Thr Ser His Ser Lys
 35 40 45
 Leu Pro Glu Gln Glu Ala Ala Glu Ala Asp Leu Ser Asn Met Glu Arg
 50 55 60
 Val Ser Leu Ser Thr Ala Asp Pro Gln Gly Val Thr Tyr Ala Glu Leu
 65 70 75 80
 Ser Thr Ser Ala Leu Ser Glu Ala Ala Ser Asp Thr Thr Gln Glu Pro
 85 90 95
 Pro Gly Ser His Glu Tyr Ala Ala Leu Lys Val
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<210> 2983
 <211> 614
 <212> DNA
 <213> Homo sapiens

<400> 2983
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 120
 gcaatgatcg tgcgcttctt gaccaagaga ttcattggag actatgaacc gaatacaggc
 180
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 240
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<211> 204

<212> PRT

<213> Homo sapiens

<400> 2984

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<210> 2985

<211> 4547

<212> DNA

<213> Homo sapiens

<400> 2985

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<212> PRT

<213> Homo sapiens

<400> 2986

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Leu Ser Val Ala Pro Gln Ile Gly Met Pro Phe Asn Gln Leu Gly Thr
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Cys Glu Thr Arg Lys Leu Ser Pro Gly Lys Lys Arg Cys Lys Asp Ile
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<400> 2987

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 <213> Homo sapiens

<400> 2990
 Met Phe Pro Val Phe Ser Gly Cys Phe Gln Glu Leu Gln Glu Lys Asn
 1 5 10 15
 Lys Ser Leu Glu Leu Val Ser Phe Glu Glu Val Ala Val His Phe Thr
 20 25 30
 Trp Glu Glu Trp Gln Asp Leu Asp Asp Ala Gln Arg Thr Leu Tyr Arg
 35 40 45
 Asp Val Met Leu Glu Thr Tyr Ser Ser Leu Val Ser Leu Gly His Cys
 50 55 60
 Ile Thr Lys Pro Glu Met Ile Phe Lys Leu Glu Gln Gly Ala Glu Pro
 65 70 75 80
 Trp Ile Val Glu Glu Thr Leu Asn Leu Arg Leu Ser Gly Gly Ser Lys
 85 90 95
 Lys Gln Val Phe Ser Gly Ile Cys His Arg Ser Leu Val Glu Leu Gln
 100 105 110
 Glu Val

<210> 2991
 <211> 980
 <212> DNA
 <213> Homo sapiens

<400> 2991
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 atctagaata taaaggttgc tggctcctgat cccttgcaga gtgagtgcag cagtgcacagc
 120
 ttggtgggct ccagctgacc cctccagagc ccctgagtgg tggcggctctg cagtcctcag
 180
 tcagcagcag cagacgtcac ccgtcataca gggccattca ctgaagtgtc acctgggtgag
 240
 cttgggttggc cagtcctctg ctctgggactg ctgctgggag gcctggggcgc cgcgcacttc
 300
 gcctctgcag tctcgggaca ctctctctgct tctttacaag cagcatcttg agaggtagac
 360
 agtttccctt cctcactttt gaagaccgca gtctctgtct tggcatctac agtgaggctg
 420
 agcgtttcct tcatgccgcc attcatcact gtctcagtta ccttgtctgt actttctgca
 480
 tctctctctc cgtcagagct ggcttccatg gccacactgc ctgccgcttc tggctgcact
 540
 gccagggcag ccgcactggg agtcagaggg tccatggggt cagtgtggt ttccatttcc
 600
 actggagaat tactccttaa agaattcttt gtgctttctc aggggaagagt gaactctgaa
 660
 aaagaagccc agcccgtctc tttagttggc atcgggtcct ctgtgctcca gacatcagat
 720

cccacagaat ccaatggagc accgtgggtt gtttccattg ggacatcaaa gttagctgac
 780
 cagttgggtg gttcactcag gtccacctcc attttatact cegtgttggc actgctgggt
 840
 tcaaacaagt cttgctttgc tccatcttct tcttcagagt ctgtactttc ctcactgtct
 900
 gtactccccg agctggatcg tctttgggat tctgggtgtga atgcgatgtg cttttcctcc
 960
 catatatctt cctcatcaga
 980

<210> 2992
 <211> 64
 <212> PRT
 <213> Homo sapiens

<400> 2992
 Val Val Ala Val Cys Ser Pro Gln Ser Ala Ala Ala Asp Val Thr Arg
 1 5 10 15
 His Thr Gly Pro Phe Thr Glu Val Ser Pro Gly Ala Leu Gly Trp Pro
 20 25 30
 Val Leu Cys Ser Gly Leu Leu Leu Gly Gly Leu Gly Ala Ala His Phe
 35 40 45
 Ala Ser Ala Val Ser Gly His Ser Ser Ala Ser Leu Gln Ala Ala Ser
 50 55 60

<210> 2993
 <211> 687
 <212> DNA
 <213> Homo sapiens

<400> 2993
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 120
 cgatacctca agtttgacat cgagattgga cgtggctcct tcaagacggt gtatcgaggg
 180
 ctagacaccg acaccacagt ggaggtggcc tgggtgtgagc tgcagactcg gaaactgtct
 240
 agagctgagc ggcagcgctt ctcagaggag gtggagatgc tcaaggggct gcagcaccac
 300
 aacatcgctc gcttctatga ttcgtggaag tcggtgctga ggggccaggc ttgcatcggt
 360
 ctggtcaccg aactcatgac ctcgggcacg ctcaagacgt acctgaggcg gttccgggag
 420
 atgaagccgc gggtccttca gcgctggagc cgccaaatcc tgcgggggact tcatttctta
 480
 cactcccggg ttcttcccat cctgcaccgg gatctcaagt gcgacaatgt ctttatcacg
 540
 ggacctactg gctctgtcaa aatcgggggac ctggggcctgg ccacgctcaa gcgcgcctcc
 600
 tttgccaaga gtgtcatcgg gaccccgga ttcattggccc ccgagatgta cgaggaaaag
 660

tacgatgagg ccgtggacgt gtacgcg
687

<210> 2994

<211> 229

<212> PRT

<213> Homo sapiens

<400> 2994

Xaa	Cys	Pro	Arg	Ser	Arg	Glu	Pro	Leu	Met	Val	Thr	Glu	Ala	Val	Ala
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Leu	Glu	Arg	Arg	Arg	Glu	Gln	Glu	Glu	Lys	Glu	Asp	Met	Glu	Thr	Gln
			20					25					30		
Ala	Val	Ala	Thr	Ser	Pro	Asp	Gly	Arg	Tyr	Leu	Lys	Phe	Asp	Ile	Glu
		35					40					45			
Ile	Gly	Arg	Gly	Ser	Phe	Lys	Thr	Val	Tyr	Arg	Gly	Leu	Asp	Thr	Asp
	50					55					60				
Thr	Thr	Val	Glu	Val	Ala	Trp	Cys	Glu	Leu	Gln	Thr	Arg	Lys	Leu	Ser
65					70					75					80
Arg	Ala	Glu	Arg	Gln	Arg	Phe	Ser	Glu	Glu	Val	Glu	Met	Leu	Lys	Gly
				85					90					95	
Leu	Gln	His	Pro	Asn	Ile	Val	Arg	Phe	Tyr	Asp	Ser	Trp	Lys	Ser	Val
			100					105					110		
Leu	Arg	Gly	Gln	Val	Cys	Ile	Val	Leu	Val	Thr	Glu	Leu	Met	Thr	Ser
		115						120				125			
Gly	Thr	Leu	Lys	Thr	Tyr	Leu	Arg	Arg	Phe	Arg	Glu	Met	Lys	Pro	Arg
	130						135					140			
Val	Leu	Gln	Arg	Trp	Ser	Arg	Gln	Ile	Leu	Arg	Gly	Leu	His	Phe	Leu
145					150					155					160
His	Ser	Arg	Val	Pro	Pro	Ile	Leu	His	Arg	Asp	Leu	Lys	Cys	Asp	Asn
				165					170					175	
Val	Phe	Ile	Thr	Gly	Pro	Thr	Gly	Ser	Val	Lys	Ile	Gly	Asp	Leu	Gly
			180					185					190		
Leu	Ala	Thr	Leu	Lys	Arg	Ala	Ser	Phe	Ala	Lys	Ser	Val	Ile	Gly	Thr
		195					200					205			
Pro	Glu	Phe	Met	Ala	Pro	Glu	Met	Tyr	Glu	Glu	Lys	Tyr	Asp	Glu	Ala
	210					215						220			
Val	Asp	Val	Tyr	Ala											
225															

<210> 2995

<211> 1879

<212> DNA

<213> Homo sapiens

<400> 2995

nttttagtagt agtattacat tgtgaatttt attttcaaatt ttgatcaata aagatgaaaa
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120
acatatagat tcatttctag ttgattcaat cctatttatg tattttaaatt acaaaataat
180
ggccatctgg ctagttccaa cggtagagca tgagactctt aaaatacaaa atacatctta
240

atgtgtcaag aagaccacag ttagcaccag gaaaggaact ttacttttagc ttctgattac
300
tttttttattt ttattttttac ttattattatta ttattattat ttttgagatg gagtctcact
360
ctgntcacc caggctggaat acagtgggtg gatctcagct cactgcaacc tccacctccc
420
aggttcaagc gattctcctg cctcagcctc ctgagtagct gggactctga tagatgcctg
480
ccaccacacc cgggtgattt ttgtattttt agtagagacg gggtttcgcc atgttgctca
540
ggctgggtctc gaactcccg a cctcaagtga cttgctcacc ttggcctccc aaagtgctgg
600
gattacaggt gtgagccact gcaccagcc tggcagtcaa ttttaagcct cctatttccc
660
aggtttttagc ttaataatcc tcattagttt ttcagatttt tgtcagtctt gttttggggc
720
tattttgcct tagtgggcct aaacagaata ttaaaatata ttaataatcc atactgagag
780
tagagtataa atgggtttct cactccttag ggacacgagt ggaaacaata catcccatga
840
acacaggtga atgtccctgg ttatccctga gctgggcagt ttcacacaat cattttttct
900
ctgaggccaa agtctgtggg ttgatcatct tagcagcttc cagaacagaa agtaggttta
960
ctttgtctcc aaattctttt tctcgggtgct caagaagaat gccctgcttt cctgatecca
1020
ccacgaaaac tcccccaagg atgaagcctt ctccttccag gtttccagag aagcctccgt
1080
tccaggctcg gaagaagttg taccacactc ccagacggat aaatcccata aacatcatct
1140
tccgcctttg tggaccatag aactttttct tttcatccag gaagatttct cctttgaaat
1200
aaggctggaa atccttctact tcagtcctga tgtgctcctt taccactgca tagaggggga
1260
cgcccagctg gtccaacatg cttttcaggg aggacagatc cgcagcttcc tctcgacaga
1320
ggaaacagcc tggcctccgc acggccataa tcacagctcc atttttttcc catagctcct
1380
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1440
ccagggccgc tttctggggc ttggacagaa acacgtctgt gttggcaagc agcaatgcca
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1560
ggtcctggag gaaagacatt tctcaagtgc ctcccttctg ccggcctttt accgccccga
1620
cgcccgggcg ctaagggggc aaaccgcccg gcccgagggg tcccaggggc gggccccgga
1680
gtacctggag gatatagacc tgaaaacact ggagaaggaa ccaaggactt tcaaagcaaa
1740
ggagctatgg gaaaaaatg gagctgtgat tatggccgtg cggaggccag gctgtttcct
1800
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1860

ccccctctat gcagtggta
1879

<210> 2996

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2996

His	Gln	Glu	Arg	Asn	Phe	Thr	Leu	Ala	Ser	Asp	Tyr	Phe	Phe	Ile	Phe
1				5					10					15	
Ile	Phe	Thr	Leu	Leu	Leu	Leu	Leu	Phe	Leu	Arg	Trp	Ser	Leu	Thr	
			20				25					30			
Leu	Xaa	Thr	Gln	Ala	Gly	Ile	Gln	Trp	Cys	Asp	Leu	Ser	Ser	Leu	Gln
		35				40					45				
Pro	Pro	Pro	Pro	Arg	Phe	Lys	Arg	Phe	Ser	Cys	Leu	Ser	Leu	Leu	Ser
	50					55					60				
Ser	Trp	Asp	Ser	Asp	Arg	Cys	Leu	Pro	Pro	His	Pro	Gly	Asp	Phe	Cys
65					70					75				80	
Ile	Phe	Ser	Arg	Asp	Gly	Val	Ser	Pro	Cys	Cys	Ser	Gly	Trp	Ser	Arg
			85					90						95	
Thr	Pro	Asp	Leu	Lys											
			100												

<210> 2997

<211> 800

<212> DNA

<213> Homo sapiens

<400> 2997

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120
acaaccatac ctgcttcctc tgagataaca agaattgaga tggagtcaac atccaccctg
180
acccccacac caagggagac cagcacctcc caggagatcc actcagccac aaagccaagc
240
actgttcctt acaaggcact cactagtgcc acgattgagg actccatgac acaagtcatg
300
tcctctagca gaggacctag ccctgatcag tccacaatgt cacaagacat atccactgaa
360
gtgatcacca ggctctctac ctcccccatc aagacagaat ctacagaaat gaccattacc
420
acccaaacag ggtctcctgg ggctacatca aggggtaccc ttaccttgga cacttcaaca
480
acttttatgt cagggaccca ctcaactgca tctcaaagat tttcacactc acagatgacc
540
gctcttatga gtagaactcc tggagatgtg ccatggctaa cccatccctc tggggaagag
600
ccgcctctg cctctttctc actggcttca cctgtcttga cctcattttt ttcgtttttt
660
gccattccc aaaaacctcc accttttttg gttcctgggc aaactttttc cctagggctg
720

gggaaaccca aaatgtgggg ccaaccaga actgaaacat tcccccaat ggacaacctt
 780
 tttgaaaagg gcccttttgc
 800

<210> 2998
 <211> 266
 <212> PRT
 <213> Homo sapiens

<400> 2998
 Thr Gln Met Gly Thr Ile Ser Ala Arg Gln Glu Phe Tyr Ser Ser Tyr
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 Pro Gly Leu Pro Glu Pro Ser Lys Val Thr Ser Pro Val Val Thr Ser
 20 25 30
 Ser Thr Ile Lys Asp Ile Val Ser Thr Thr Ile Pro Ala Ser Ser Glu
 35 40 45
 Ile Thr Arg Ile Glu Met Glu Ser Thr Ser Thr Leu Thr Pro Thr Pro
 50 55 60
 Arg Glu Thr Ser Thr Ser Gln Glu Ile His Ser Ala Thr Lys Pro Ser
 65 70 75 80
 Thr Val Pro Tyr Lys Ala Leu Thr Ser Ala Thr Ile Glu Asp Ser Met
 85 90 95
 Thr Gln Val Met Ser Ser Ser Arg Gly Pro Ser Pro Asp Gln Ser Thr
 100 105 110
 Met Ser Gln Asp Ile Ser Thr Glu Val Ile Thr Arg Leu Ser Thr Ser
 115 120 125
 Pro Ile Lys Thr Glu Ser Thr Glu Met Thr Ile Thr Thr Gln Thr Gly
 130 135 140
 Ser Pro Gly Ala Thr Ser Arg Gly Thr Leu Thr Leu Asp Thr Ser Thr
 145 150 155 160
 Thr Phe Met Ser Gly Thr His Ser Thr Ala Ser Gln Arg Phe Ser His
 165 170 175
 Ser Gln Met Thr Ala Leu Met Ser Arg Thr Pro Gly Asp Val Pro Trp
 180 185 190
 Leu Thr His Pro Ser Gly Glu Glu Pro Ala Ser Ala Ser Phe Ser Leu
 195 200 205
 Ala Ser Pro Val Leu Thr Ser Phe Phe Ser Phe Phe Ala His Ser Gln
 210 215 220
 Lys Pro Pro Pro Phe Leu Val Pro Gly Gln Thr Phe Ser Leu Gly Leu
 225 230 235 240
 Gly Lys Pro Lys Met Trp Gly Gln Pro Arg Thr Glu Thr Phe Pro Pro
 245 250 255
 Met Asp Asn Leu Phe Glu Lys Gly Pro Phe
 260 265

<210> 2999
 <211> 550
 <212> DNA
 <213> Homo sapiens

<400> 2999
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 60

acccccttgc cactttggcc ccctccagge tttgggcact gacaagcatg ggaaggaggc
 120
 tgaggggtgc actgaggaca gcccagtget ggctgcagg cacccttaa catgaacagc
 180
 ctggtcacca tgaacagcag caggaggcag acaggctcct ggggtggaaag aagctggtcc
 240
 acagtgaaga cccacctcca agccaggga agcctgaagc ctgggggatg ggtcgccagt
 300
 cccagaaacc gcaagggcaa cttgtggtgc tttccctgg gccacccat ggccgcccac
 360
 ggacgaattg gcatgcactt tctccctct gagggccata aaagcccctg ggctcagcca
 420
 gagctgagcg gatatcagga cgacaagctg cacagaggta ctaccatac caaggcctcc
 480
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 cagggtctcc
 550

<210> 3000

<211> 167

<212> PRT

<213> Homo sapiens

<400> 3000

Met	Cys	Ser	Ser	Gln	Arg	Gly	Gly	Leu	Gly	Met	Gly	Ser	Thr	Ser
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Val	Gln	Leu	Val	Leu	Ile	Ser	Ala	Gln	Leu	Trp	Leu	Ser	Pro	Gly
		20					25				30			
Ala	Phe	Met	Gly	Leu	Arg	Gly	Glu	Lys	Val	His	Ala	Asn	Ser	Met
		35				40				45				
Gly	Gly	His	Gly	Trp	Ala	Gln	Gly	Lys	Ala	Pro	Gln	Val	Ala	Leu
	50					55				60				
Val	Ser	Gly	Thr	Gly	Asp	Pro	Ser	Pro	Arg	Leu	Gln	Ala	Phe	Pro
65					70				75					80
Leu	Glu	Val	Gly	Leu	His	Cys	Gly	Pro	Ala	Ser	Phe	His	Pro	Gly
			85					90					95	
Cys	Leu	Pro	Pro	Ala	Ala	Val	His	Gly	Asp	Gln	Ala	Val	His	Val
		100						105				110		Lys
Gly	Cys	Leu	Gln	Ala	Ser	Thr	Gly	Leu	Ser	Ser	Val	His	Pro	Ser
	115					120					125			Ala
Ser	Phe	Pro	Cys	Leu	Ser	Val	Pro	Lys	Ala	Trp	Arg	Gly	Pro	Lys
	130					135				140				Trp
Gln	Gly	Gly	Trp	His	Val	Ser	Thr	Thr	Pro	Ser	Met	Cys	Thr	Leu
145					150					155				160
Trp	Ala	Val	Thr	Ala	Pro	Gly								
			165											

<210> 3001

<211> 1092

<212> DNA

<213> Homo sapiens

<400> 3001

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 120
 gaagtacaga ggttgagccc ctatgtatgc ctgggggagt cccagaaagt ggaatcccaa
 180
 ccttgctcag ctcaccagtg tttcttctat aaccagaca ttgcaaagac agcagtaccc
 240
 actgagggcat ccagcccagc tcaggccctg ccaccnnca gtaccaaaagc atcattgtca
 300
 ggcaagggat acagaacaca gtgctctcac cagactgcag cttgggggac acccagcacg
 360
 gagagaagct gaggcggaac tgcactatct accggccctg gttctcccc tacagctact
 420
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 480
 atgagggcaa gtgggacaac tgcctttctg aggacatggc tgagaacatc tgttcgtcct
 540
 cttcctcccc agagaacact tgccctcgag aagccaccaa gaaatccagg catggcctgg
 600
 actccatcac atcccaggac atcctaattgg cttccagggtg gcaccagca cagcagaatg
 660
 gctacaagtg cgtggcctgc tgccgcatgt accccaccct ggacttctc aagagccaca
 720
 tcaagagggg cttcagggag ggcttcagct gcaaggtgta ctaccgcaag ctcaaagccc
 780
 tctggagcaa ggagcagaag gcccggtggt gagacaggct ctctccggc agctgccagg
 840
 ccttcaatag tctgtctgaa caccttaggc aaattggcgg tgaagcctac ttatgtctct
 900
 agagagatgc caataaagtt agtcacagcc ttctgtccag tctgaggtca cccgcacag
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 aaaatcaaaa aa
 1092

<210> 3002

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3002

Met	Ala	Pro	Phe	Arg	Ile	Pro	Gln	Asp	Val	Ile	His	Asn	Ser	Ser	Ala
1				5					10					15	
Trp	Leu	Ser	Leu	Lys	Gly	His	Cys	Ser	Val	Ser	Ala	Leu	Arg	Cys	Leu
			20					25					30		
Glu	Val	Gln	Arg	Leu	Ser	Pro	Tyr	Val	Cys	Leu	Gly	Glu	Ser	Gln	Lys
		35					40					45			
Val	Glu	Ser	Gln	Pro	Cys	Ser	Ala	His	Gln	Cys	Phe	Phe	Tyr	Asn	Pro
	50					55					60				
Asp	Ile	Ala	Lys	Thr	Ala	Val	Pro	Thr	Glu	Ala	Ser	Ser	Pro	Ala	Gln

65					70					75					80
Ala	Leu	Pro	Pro	Xaa	Ser	Thr	Lys	Ala	Ser	Leu	Ser	Gly	Lys	Gly	Tyr
				85					90					95	
Arg	Thr	Gln	Cys	Ser	His	Gln	Thr	Ala	Ala	Trp	Gly	Thr	Pro	Ser	Thr
			100					105					110		
Glu	Arg	Ser													
			115												

<210> 3003
 <211> 474
 <212> DNA
 <213> Homo sapiens

<400> 3003
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 120
 ccaacaggag gaccggaaga gactggcgga gctgctggtc tccgtcctgg aacagggctt
 180
 gccaccctcc caccgtgtca tctggctgca gagtgtccga atcctgtccc gggaccgcaa
 240
 ctgcctggac ccgttcacca gccgccagag cctgcaggca ctagcctgct atgctgacat
 300
 ctctgtctct gaggggtccg tcccagagtc cgcagacatg gatgttgtac tggagtcctt
 360
 caagtgcctg tgcaacctcg tgctcagcag ccctgtggca cagatgctgg cagcagaggc
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 474

<210> 3004
 <211> 155
 <212> PRT
 <213> Homo sapiens

<400> 3004															
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Val	Ile	Met	Glu	Ala	Leu	Arg	Ser	Tyr	Asn	Gln	Glu	His	Ser	Gln	Ser
		20					25					30			
Phe	Thr	Phe	Asp	Asp	Ala	Gln	Gln	Glu	Asp	Arg	Lys	Arg	Leu	Ala	Glu
	35					40					45				
Leu	Leu	Val	Ser	Val	Leu	Glu	Gln	Gly	Leu	Pro	Pro	Ser	His	Arg	Val
	50				55					60					
Ile	Trp	Leu	Gln	Ser	Val	Arg	Ile	Leu	Ser	Arg	Asp	Arg	Asn	Cys	Leu
65				70				75					80		
Asp	Pro	Phe	Thr	Ser	Arg	Gln	Ser	Leu	Gln	Ala	Leu	Ala	Cys	Tyr	Ala
			85				90					95			
Asp	Ile	Ser	Val	Ser	Glu	Gly	Ser	Val	Pro	Glu	Ser	Ala	Asp	Met	Asp
		100					105					110			
Val	Val	Leu	Glu	Ser	Leu	Lys	Cys	Leu	Cys	Asn	Leu	Val	Leu	Ser	Ser
		115				120					125				
Pro	Val	Ala	Gln	Met	Leu	Ala	Ala	Glu	Ala	Arg	Leu	Val	Val	Lys	Leu

130 135 140
 Thr Glu Arg Val Gly Leu Tyr Arg Glu Arg Ser
 145 150 155

<210> 3005
 <211> 799
 <212> DNA
 <213> Homo sapiens

<400> 3005
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 120
 ccaggcctcg tgaagattgt ccgcaacagc cggcgggaag gactgatccg cgcgcggctg
 180
 cagggctgga aggcggccac cgccccagtc gtcggcttct ttgatgcca cgtcagattc
 240
 aacacgggct gggccgagcc cgcactgtcg cggatccgag aggaccggcg tcgcatcgtg
 300
 ctgccagcca tcgacaacat caagtacagc acgtttgagg tgcagcagta tgcgaacgcc
 360
 gcccatggct acaactgggg cctctgggtgc atgtacatca tcccccgca ggactggctg
 420
 gaccgcggcg acgagtcagc acccatcagg accccagcca tgatcggctg ctccttcgta
 480
 gtggaccgcg agtacttcgg agacattggg ctgctggacc ccggcatgga ggtgtatggc
 540
 ggcgagaacg tagaactggg catgaggggtg tggcagtgtg gcggcagcat ggaggtgctg
 600
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 660
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<210> 3006
 <211> 266
 <212> PRT
 <213> Homo sapiens

<400> 3006
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 Asp Gln Tyr Val Asn Lys Arg Tyr Pro Gly Leu Val Lys Ile Val Arg
 35 40 45
 Asn Ser Arg Arg Glu Gly Leu Ile Arg Ala Arg Leu Gln Gly Trp Lys
 50 55 60
 Ala Ala Thr Ala Pro Val Val Gly Phe Phe Asp Ala His Val Glu Phe

65		70		75		80
Asn Thr Gly Trp	Ala Glu Pro Ala Leu Ser Arg Ile Arg Glu Asp Arg					
	85		90		95	
Arg Arg Ile Val Leu Pro Ala Ile Asp Asn Ile Lys Tyr Ser Thr Phe						
	100		105		110	
Glu Val Gln Gln Tyr Ala Asn Ala Ala His Gly Tyr Asn Trp Gly Leu						
	115		120		125	
Trp Cys Met Tyr Ile Ile Pro Pro Gln Asp Trp Leu Asp Arg Gly Asp						
	130		135		140	
Glu Ser Ala Pro Ile Arg Thr Pro Ala Met Ile Gly Cys Ser Phe Val						
	145		150		155	
Val Asp Arg Glu Tyr Phe Gly Asp Ile Gly Leu Leu Asp Pro Gly Met						
	165		170		175	
Glu Val Tyr Gly Gly Glu Asn Val Glu Leu Gly Met Arg Val Trp Gln						
	180		185		190	
Cys Gly Gly Ser Met Glu Val Leu Pro Cys Ser Arg Val Ala His Ile						
	195		200		205	
Glu Arg Thr Arg Lys Pro Tyr Asn Asn Asp Ile Asp Tyr Tyr Ala Lys						
	210		215		220	
Arg Asn Ala Leu Arg Thr Ala Glu Val Trp Met Asp Asp Phe Lys Ser						
	225		230		235	
His Val Tyr Met Ala Trp Asn Ile Pro Met Ser Asn Pro Gly Val Asp						
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<210> 3007

<211> 536

<212> DNA

<213> Homo sapiens

<400> 3007

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<210> 3008

<211> 163

<212> PRT

<213> Homo sapiens

<400> 3008

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          20           25           30
Ala Asp Ile Ser Leu Arg Ser Arg Trp Thr Asn Met Asn Ala Leu His
          35           40           45
Tyr Ala Ala Tyr Phe Asp Val Pro Glu Leu Ile Arg Val Ile Leu Lys
          50           55           60
Thr Ser Lys Pro Lys Asp Val Asp Ala Pro Cys Ser Asp Phe Asn Phe
65           70           75           80
Gly Thr Ala Leu His Ile Ala Ala Tyr Asn Leu Cys Ala Gly Ala Val
          85           90           95
Lys Cys Leu Leu Glu Gln Gly Ala Asn Pro Ala Phe Arg Asn Asp Lys
          100          105          110
Gly Gln Ile Pro Ala Asp Val Val Pro Asp Pro Val Asp Met Pro Leu
          115          120          125
Glu Met Ala Asp Ala Ala Ala Thr Ala Lys Glu Ile Lys Gln Met Leu
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Pro Ser Arg

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<210> 3009

<211> 1335

<212> DNA

<213> Homo sapiens

<400> 3009

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420
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660

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<210> 3010

<211> 310

<212> PRT

<213> Homo sapiens

<400> 3010

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Glu	Arg	Leu	Glu	Glu	Phe	Glu	Gly	Gly	Gly	Gly	Gly	Glu	Gly	Asn	Val
			20					25					30		
Ser	Gln	Val	Gly	Arg	Val	Trp	Pro	Ser	Ser	Tyr	Arg	Ala	Leu	Ile	Ser
		35					40					45			
Ala	Phe	Ser	Arg	Leu	Thr	Arg	Leu	Asp	Asp	Phe	Thr	Cys	Lys	Lys	Ile
		50				55					60				
Gly	Ser	Gly	Phe	Phe	Ser	Glu	Val	Phe	Lys	Val	Arg	His	Arg	Ala	Ser
65					70				75					80	
Gly	Gln	Val	Met	Ala	Leu	Lys	Met	Asn	Thr	Leu	Ser	Ser	Asn	Arg	Ala
			85					90					95		
Asn	Met	Leu	Lys	Glu	Val	Gln	Leu	Met	Asn	Arg	Leu	Ser	His	Pro	Asn
		100					105					110			
Ile	Leu	Arg	Phe	Met	Gly	Val	Cys	Val	His	Gln	Gly	Gln	Leu	His	Ala
		115				120					125				
Leu	Thr	Glu	Tyr	Ile	Asn	Ser	Gly	Asn	Leu	Glu	Gln	Leu	Leu	Asp	Ser
	130					135				140					
Asn	Leu	His	Leu	Pro	Trp	Thr	Val	Arg	Val	Lys	Leu	Ala	Tyr	Asp	Ile
145				150					155					160	
Ala	Val	Gly	Leu	Ser	Tyr	Leu	His	Phe	Lys	Gly	Ile	Phe	His	Arg	Asp
			165					170					175		
Leu	Thr	Ser	Lys	Asn	Cys	Leu	Ile	Lys	Arg	Asp	Glu	Asn	Gly	Tyr	Ser

						180						185						190					
Ala	Val	Val	Ala	Asp	Phe	Gly	Leu	Ala	Glu	Lys	Ile	Pro	Asp	Val	Ser								
						195						200						205					
Met	Gly	Ser	Glu	Lys	Leu	Ala	Val	Val	Gly	Ser	Pro	Phe	Trp	Met	Ala								
						210						215						220					
Pro	Glu	Val	Leu	Arg	Asp	Glu	Pro	Tyr	Asn	Glu	Lys	Ala	Asp	Val	Phe								
						225						230						235					
Ser	Tyr	Gly	Ile	Ile	Leu	Cys	Glu	Ile	Ile	Val	Arg	Ile	Gln	Ala	Asp								
						240						245						250					
Pro	Asp	Tyr	Leu	Pro	Arg	Thr	Glu	Asn	Phe	Gly	Leu	Asp	Tyr	Asp	Ala								
						255						260						265					
Phe	Gln	His	Met	Val	Gly	Asp	Cys	Pro	Pro	Asp	Phe	Leu	Gln	Leu	Thr								
						270						275						280					
Phe	Asn	Cys	Cys	Asn	Val	Ser	Val	Phe	Leu	Pro	Leu	Pro	Phe	Ile	Arg								
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<210> 3011
<211> 3253
<212> DNA
<213> Homo sapiens
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300					
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<210> 3012

<211> 870

<212> PRT

<213> Homo sapiens

<400> 3012

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			20					25					30		
Leu	Glu	Gln	Asp	Thr	Gln	Gly	Leu	Asp	Gly	Trp	Trp	Leu	Cys	Ser	Leu
		35				40						45			
His	Gly	Arg	Gln	Gly	Ile	Val	Pro	Gly	Asn	Arg	Leu	Lys	Ile	Leu	Val
	50				55						60				
Gly	Met	Tyr	Asp	Lys	Lys	Pro	Ala	Gly	Pro	Gly	Ser	Gly	Pro	Pro	Ala
65					70				75					80	
Thr	Pro	Ala	Gln	Pro	Gln	Pro	Gly	Leu	His	Ala	Pro	Ala	Pro	Pro	Ala
			85					90						95	
Ser	Gln	Tyr	Thr	Pro	Met	Leu	Pro	Asn	Thr	Tyr	Gln	Pro	Gln	Pro	Asp
		100						105					110		
Ser	Val	Tyr	Leu	Val	Pro	Thr	Pro	Ser	Lys	Ala	Gln	Gln	Gly	Leu	Tyr
		115				120						125			
Gln	Val	Pro	Gly	Pro	Ser	Pro	Gln	Phe	Gln	Ser	Pro	Pro	Ala	Lys	Gln
	130					135					140				
Thr	Ser	Thr	Phe	Ser	Lys	Gln	Thr	Pro	His	His	Pro	Phe	Pro	Ser	Pro
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Asp	Ile	Tyr	Gln	Val	Pro	Pro	Ser	Ala	Gly	Met	Gly	His	Asp	Ile	Tyr					
			180				185						190							
Gln	Val	Pro	Pro	Ser	Met	Asp	Thr	Arg	Ser	Trp	Glu	Gly	Thr	Lys	Pro					
			195				200						205							
Pro	Ala	Lys	Val	Val	Val	Pro	Thr	Arg	Val	Gly	Gln	Gly	Tyr	Val	Tyr					
			210				215						220							
Glu	Ala	Ala	Gln	Pro	Glu	Gln	Asp	Glu	Tyr	Asp	Ile	Pro	Arg	His	Leu					
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Leu	Ala	Pro	Gly	Pro	Gln	Asp	Ile	Tyr	Asp	Val	Pro	Pro	Val	Arg	Gly					
			245			250						255								
Leu	Leu	Pro	Ser	Gln	Tyr	Gly	Gln	Glu	Val	Tyr	Asp	Thr	Pro	Pro	Met					
			260			265						270								
Ala	Val	Lys	Gly	Pro	Asn	Gly	Arg	Asp	Pro	Leu	Leu	Glu	Val	Tyr	Asp					
			275			280						285								
Val	Pro	Pro	Ser	Val	Glu	Lys	Gly	Leu	Pro	Pro	Ser	Asn	His	His	Ala					
			290			295						300								
Val	Tyr	Asp	Val	Pro	Pro	Ser	Val	Ser	Lys	Asp	Val	Pro	Asp	Gly	Pro					
305				310			315						320							
Leu	Leu	Arg	Glu	Glu	Thr	Tyr	Asp	Val	Pro	Pro	Ala	Phe	Ala	Lys	Ala					
			325			330						335								
Lys	Pro	Phe	Asp	Pro	Ala	Arg	Thr	Pro	Leu	Val	Leu	Gly	Ala	Pro	Pro					
			340			345						350								
Pro	Asp	Ser	Pro	Pro	Ala	Glu	Asp	Val	Tyr	Tyr	Val	Pro	Pro	Pro	Ala					
			355			360						365								
Pro	Asp	Leu	Tyr	Asp	Val	Pro	Pro	Gly	Leu	Arg	Arg	Pro	Gly	Pro	Gly					
			370			375						380								
Thr	Leu	Tyr	Asp	Val	Pro	Arg	Glu	Arg	Val	Leu	Pro	Pro	Glu	Val	Ala					
385				390			395						400							
Asp	Gly	Gly	Val	Val	Asp	Ser	Gly	Val	Tyr	Ala	Val	Pro	Pro	Pro	Ala					
			405			410						415								
Glu	Arg	Glu	Ala	Pro	Ala	Glu	Gly	Lys	Arg	Leu	Ser	Ala	Ser	Ser	Thr					
			420			425						430								
Gly	Ser	Thr	Arg	Ser	Ser	Gln	Ser	Ala	Ser	Ser	Leu	Glu	Val	Ala	Gly					
			435			440						445								
Pro	Gly	Arg	Glu	Pro	Leu	Glu	Leu	Glu	Val	Ala	Val	Glu	Ala	Leu	Ala					
			450			455						460								
Arg	Leu	Gln	Gln	Gly	Val	Ser	Ala	Thr	Val	Ala	His	Leu	Leu	Asp	Leu					
465				470			475						480							
Ala	Gly	Ser	Ala	Gly	Ala	Thr	Gly	Gly	Trp	Arg	Ser	Pro	Ser	Glu	Pro					
			485			490						495								
Gln	Glu	Pro	Leu	Val	Gln	Asp	Leu	Gln	Ala	Ala	Val	Ala	Ala	Val	Gln					
			500			505						510								
Ser	Ala	Val	His	Glu	Leu	Leu	Glu	Phe	Ala	Arg	Ser	Ala	Val	Gly	Asn					
			515			520						525								
Ala	Ala	His	Thr	Ser	Asp	Arg	Ala	Leu	His	Ala	Lys	Leu	Ser	Arg	Gln					
			530			535						540								
Leu	Gln	Lys	Met	Glu	Asp	Val	His	Gln	Thr	Leu	Val	Ala	His	Gly	Gln					
545				550			555						560							
Ala	Leu	Asp	Ala	Gly	Arg	Gly	Gly	Ser	Gly	Ala	Thr	Leu	Glu	Asp	Leu					
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<212> DNA
<213> Homo sapiens
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120
gaccaggtgc tggaggagca gaccaaggca gcgcagcagg ctgggtgggg cctcctcctt
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240
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248
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<210> 3014

<211> 82
 <212> PRT
 <213> Homo sapiens

<400> 3014
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 Leu Ala Ser Gly Leu Asp Val Ile Asp Gln Val Leu Glu Glu Gln Thr
 35 40 45
 Lys Ala Ala Gln Gln Ala Gly Trp Gly Leu Leu Leu Ala Arg Arg Trp
 50 55 60
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 65 70 75 80
 Ile Asp

<210> 3015
 <211> 438
 <212> DNA
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 300
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 <213> Homo sapiens

<400> 3016
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<210> 3017

<211> 4796

<212> DNA

<213> Homo sapiens

<400> 3017

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 <213> Homo sapiens

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WO 00/58473

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<210> 3020
 <211> 58
 <212> PRT
 <213> Homo sapiens

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<210> 3021
 <211> 1008
 <212> DNA
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<210> 3022

<211> 94

<212> PRT

<213> Homo sapiens

<400> 3022

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His	Cys	Ser	Leu	Asp	Leu	Pro	Gly	Ser	Ser	Asp	Pro	Pro	Gly	Ser	Pro
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<210> 3023

<211> 1834

<212> DNA

<213> Homo sapiens

<400> 3023

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<210> 3024

<211> 347
 <212> PRT
 <213> Homo sapiens

<400> 3024

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 Met Pro Ala Pro Leu Leu Lys Asn Val Gln Leu Ser Glu Ser Lys Ala
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<210> 3025
 <211> 1370
 <212> DNA
 <213> Homo sapiens

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<210> 3026

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3026
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 35 40 45
 Arg Glu Leu Val Cys Lys Glu Ser Lys Lys Thr Phe Lys Ala Thr Ile
 50 55 60
 Ala Met Ser Gln Glu Phe Pro Leu Gly Ile Glu Leu Leu Leu Asn Val
 65 70 75 80
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<210> 3027

<211> 1154

<212> DNA

<213> Homo sapiens

<400> 3027
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<210> 3028

<211> 331

<212> PRT

<213> Homo sapiens

<400> 3028

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Lys	Glu	Lys	Asp	Asp	Ile	Leu	Phe	Glu	Asp	Leu	Gln	Asp	Asn	Val	Asn
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	50					55					60				
Asp	Asp	Asp	Asp	Asp	Trp	Asp	Trp	Asp	Glu	Gly	Val	Gly	Lys	Leu	Ala
65					70				75						80
Lys	Gly	Tyr	Val	Trp	Asn	Gly	Gly	Ser	Asn	Pro	Gln	Ala	Asn	Arg	Gln
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Thr	Ser	Asp	Ser	Ser	Ser	Ala	Lys	Met	Ser	Thr	Pro	Ala	Asp	Lys	Val
			100					105					110		
Leu	Arg	Lys	Phe	Glu	Asn	Lys	Ile	Asn	Leu	Asp	Lys	Leu	Asn	Val	Thr
		115					120					125			
Asp	Ser	Val	Ile	Asn	Lys	Val	Thr	Glu	Lys	Ser	Arg	Gln	Lys	Glu	Ala
		130				135					140				
Asp	Met	Tyr	Arg	Ile	Lys	Asp	Lys	Ala	Asp	Arg	Ala	Thr	Val	Glu	Gln
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Val	Leu	Asp	Pro	Arg	Thr	Arg	Met	Ile	Leu	Phe	Lys	Met	Leu	Thr	Arg
			165					170						175	
Gly	Ile	Ile	Thr	Glu	Ile	Asn	Gly	Cys	Ile	Ser	Thr	Gly	Lys	Glu	Ala
		180					185					190			
Asn	Val	Tyr	His	Ala	Ser	Thr	Ala	Asn	Gly	Glu	Ser	Arg	Ala	Ile	Lys
		195					200					205			
Ile	Tyr	Lys	Thr	Ser	Ile	Leu	Val	Phe	Lys	Asp	Arg	Asp	Lys	Tyr	Val
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Ser	Gly	Glu	Phe	Arg	Phe	Arg	His	Gly	Tyr	Cys	Lys	Gly	Asn	Pro	Arg
225					230				235					240	
Lys	Met	Val	Lys	Thr	Trp	Ala	Glu	Lys	Glu	Met	Arg	Asn	Leu	Ile	Arg
			245					250					255		
Leu	Asn	Thr	Ala	Glu	Ile	Pro	Cys	Pro	Glu	Pro	Ile	Met	Leu	Arg	Ser

260 265 270
 His Val Leu Val Met Ser Phe Ile Gly Lys Asp Asp Ile Ser Phe His
 275 280 285
 Ser Arg Pro Ala Pro Leu Leu Lys Asn Val Gln Leu Ser Glu Ser Lys
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 Ala Arg Glu Leu Tyr Leu Gln Val Ile Gln Tyr Met Arg Arg Met Tyr
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 Gln Asp Ala Arg Leu Val His Ala Asp Arg Arg
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<210> 3029
 <211> 344
 <212> DNA
 <213> Homo sapiens

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 180
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 240
 atgagcaacg atttctccaa tgatgatggg gttgatgaag gaatctgttt tgaaaccaat
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 <211> 114
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Ser Thr Phe Ile Asp Val Glu Asp Glu Lys Ser Pro Gln Thr Glu Ser
 50 55 60
 Cys Thr Asp Arg Gly Ala Glu Asn Glu Gly Ser Cys His Ser Asp Gln
 65 70 75 80
 Met Ser Asn Asp Phe Ser Asn Asp Asp Gly Val Asp Glu Gly Ile Cys
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 Phe Glu Thr Asn Ser Gly Thr Glu Lys Ile Ser Lys Ser Gly Pro Glu
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 Lys Asn

<210> 3031
 <211> 567

<212> DNA

<213> Homo sapiens

<400> 3031

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 180
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 240
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 300
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 360
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<210> 3032

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3032

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			20					25					30		
Thr	Pro	Arg	Met	Asn	Arg	Arg	Leu	Val	Gly	Pro	Asp	Val	Ile	Pro	Leu
		35					40					45			
Pro	His	Ile	Tyr	Gly	Ala	Arg	Ile	Lys	Gly	Val	Glu	Val	Phe	Cys	Pro
	50					55					60				
Leu	Asp	Pro	Pro	Pro	Pro	Tyr	Glu	Ala	Val	Val	Ser	Gln	Met	Asp	Gln
65					70				75					80	
Glu	Gln	Gly	Ser	Ser	Phe	Gln	Met	Ser	Glu	Gly	Ser	Glu	Ala	Ala	Val
			85					90						95	
Ile	Pro	Leu	Asp	Leu	Gly	Cys	Thr	Gln	Val	Thr	Gln	Asp	Gly	Asp	Ile
		100						105				110			
Pro	Asn	Ile	Pro	Ala	Glu	Glu	Asn	Ala	Ser	Thr	Ser	Thr	Pro	Ser	Ser
	115						120					125			
Thr	Leu	Val	Arg	Pro	Ile	Arg	Ser	Arg	Arg	Ala	Leu	Pro	Pro	Leu	Arg
	130					135					140				
Thr	Arg	Ser	Lys	Ser	Asp	Pro	Val	Leu	His	Pro	Ser	Glu	Glu	Arg	Ala
145				150				155						160	
Ala	Pro	Val	Leu	Ser	Cys	Glu	Ala	Ala	Thr	Gln	Thr	Glu	Arg	Arg	Leu
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185

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 <211> 821
 <212> DNA
 <213> Homo sapiens

<400> 3033
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 300
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 360
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 420
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 480
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<210> 3034
 <211> 221
 <212> PRT
 <213> Homo sapiens

<400> 3034
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 35 40 45
 Tyr Cys Ile Ala Asp Leu Ser Lys Tyr Lys Glu Asn Lys Phe Gly Phe
 50 55 60
 Arg Trp Arg Val Glu Lys Glu Val Ile Ser Gly Lys Gly Gln Phe Phe
 65 70 75 80
 Cys Gly Asn Lys Tyr Cys Asp Lys Lys Glu Gly Leu Lys Ser Trp Glu

				85						90					95				
Val	Asn	Phe	Gly	Tyr	Ile	Glu	His	Gly	Glu	Lys	Arg	Asn	Ala	Leu	Val				
			100					105					110						
Lys	Leu	Arg	Leu	Cys	Gln	Glu	Cys	Ser	Ile	Lys	Leu	Asn	Phe	His	His				
		115					120					125							
Arg	Arg	Lys	Glu	Ile	Lys	Ser	Lys	Lys	Arg	Lys	Asp	Lys	Thr	Lys	Lys				
		130					135				140								
Asp	Cys	Glu	Glu	Ser	Ser	His	Lys	Lys	Ser	Arg	Leu	Ser	Ser	Ala	Glu				
145					150				155						160				
Glu	Ala	Ser	Lys	Lys	Lys	Asp	Lys	Gly	His	Ser	Ser	Ser	Lys	Lys	Ser				
			165					170					175						
Glu	Asp	Ser	Leu	Leu	Arg	Asn	Ser	Asp	Glu	Glu	Glu	Ser	Ala	Ser	Glu				
		180						185				190							
Ser	Glu	Leu	Trp	Lys	Gly	Pro	Leu	Pro	Glu	Thr	Asp	Glu	Lys	Ser	Gln				
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<210> 3035

<211> 878

<212> DNA

<213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

<400> 3036
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 Val Ile Leu Phe Leu Glu Gly Asn Arg Asp Pro Gly Gly Arg Gly Trp
 50 55 60
 Pro
 65

<210> 3037
 <211> 3538
 <212> DNA
 <213> Homo sapiens

<400> 3037
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 420
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 480
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<210> 3038

<211> 697

<212> PRT

<213> Homo sapiens

<400> 3038

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Leu	Phe	Ile	Val	Pro	Arg	Gln	Arg	Leu	Asp	Leu	Leu	Pro	Phe	Tyr	Ala
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Arg	Leu	Val	Ala	Thr	Leu	His	Pro	Cys	Met	Ser	Asp	Val	Ala	Glu	Asp
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Leu	Cys	Ser	Met	Leu	Arg	Gly	Asp	Phe	Arg	Phe	His	Val	Arg	Lys	Lys
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Asp	Gln	Ile	Asn	Ile	Glu	Thr	Lys	Asn	Lys	Thr	Val	Arg	Phe	Ile	Gly
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Glu	Leu	Thr	Lys	Phe	Lys	Met	Phe	Thr	Lys	Asn	Asp	Thr	Leu	His	Cys

			100					105					110				
Leu	Lys	Met	Leu	Leu	Ser	Asp	Phe	Ser	His	His	His	Ile	Glu	Met	Ala		
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		130					135					140					
Ser	His	Leu	Arg	Thr	Ser	Val	Leu	Leu	Glu	Gln	Met	Met	Arg	Lys	Lys		
145					150					155					160		
Gln	Ala	Met	His	Leu	Asp	Ala	Arg	Tyr	Val	Thr	Met	Val	Glu	Asn	Ala		
			165						170					175			
Tyr	Tyr	Tyr	Cys	Asn	Pro	Pro	Pro	Ala	Glu	Lys	Thr	Val	Lys	Lys	Lys		
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Arg	Pro	Pro	Leu	Gln	Glu	Tyr	Val	Arg	Lys	Leu	Leu	Tyr	Lys	Asp	Leu		
		195					200					205					
Ser	Lys	Val	Thr	Thr	Glu	Lys	Val	Leu	Arg	Gln	Met	Arg	Lys	Leu	Pro		
	210					215					220						
Trp	Gln	Asp	Gln	Glu	Val	Lys	Asp	Tyr	Val	Ile	Cys	Cys	Met	Ile	Asn		
225					230					235					240		
Ile	Trp	Asn	Val	Lys	Tyr	Asn	Ser	Ile	His	Cys	Val	Ala	Asn	Leu	Leu		
		245						250					255				
Ala	Gly	Leu	Val	Leu	Tyr	Gln	Glu	Asp	Val	Gly	Ile	His	Val	Val	Asp		
		260					265						270				
Gly	Val	Leu	Glu	Asp	Ile	Arg	Leu	Gly	Met	Glu	Val	Asn	Gln	Pro	Lys		
	275					280						285					
Phe	Asn	Gln	Arg	Arg	Ile	Ser	Ser	Ala	Lys	Phe	Leu	Gly	Glu	Leu	Tyr		
	290					295					300						
Asn	Tyr	Arg	Met	Val	Glu	Ser	Ala	Val	Ile	Phe	Arg	Thr	Leu	Tyr	Ser		
305				310						315					320		
Phe	Thr	Ser	Phe	Gly	Val	Asn	Pro	Asp	Gly	Ser	Pro	Ser	Ser	Leu	Asp		
			325						330					335			
Pro	Pro	Glu	His	Leu	Phe	Arg	Ile	Arg	Leu	Val	Cys	Thr	Ile	Leu	Asp		
		340						345					350				
Thr	Cys	Gly	Gln	Tyr	Phe	Asp	Arg	Gly	Ser	Ser	Lys	Arg	Lys	Leu	Asp		
	355					360						365					
Cys	Phe	Leu	Val	Tyr	Phe	Gln	Arg	Tyr	Val	Trp	Trp	Lys	Lys	Ser	Leu		
	370					375				380							
Glu	Val	Trp	Thr	Lys	Asp	His	Pro	Phe	Pro	Ile	Asp	Ile	Asp	Tyr	Met		
385				390						395					400		
Ile	Ser	Asp	Thr	Leu	Glu	Leu	Leu	Arg	Pro	Lys	Ile	Lys	Leu	Cys	Asn		
			405					410					415				
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		420						425					430				
Leu	Ile	Lys	Leu	Gly	Leu	Val	Asn	Asp	Lys	Asp	Ser	Lys	Asp	Phe	Met		
	435						440					445					
Thr	Glu	Gly	Glu	Asn	Leu	Glu	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Gly	Gly		
	450					455					460						
Ala	Glu	Thr	Glu	Glu	Gln	Ser	Gly	Asn	Glu	Ser	Glu	Val	Asn	Glu	Pro		
465					470					475					480		
Glu	Glu	Glu	Glu	Gly	Ser	Asp	Asn	Asp	Asp	Asp	Glu	Gly	Glu	Glu	Glu		
			485					490					495				
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		500						505				510					
Thr	Asp	Glu	Glu	Asn	Thr	Glu	Val	Met	Ile	Lys	Gly	Gly	Gly	Leu	Lys		
	515					520						525					
His	Val	Pro	Cys	Val	Glu	Asp	Glu	Asp	Phe	Ile	Gln	Ala	Leu	Asp	Lys		

530 535 540
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 580 585 590
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 595 600 605
 Lys Ile Leu Asn Val Pro Met Ser Ser Gln Leu Ala Ala Asn His Trp
 610 615 620
 Asn Gln Gln Gln Ala Glu Gln Glu Glu Arg Met Arg Met' Lys Lys Leu
 625 630 635 640
 Thr Leu Asp Ile Asn Glu Arg Gln Glu Gln Glu Asp Tyr Gln Glu Met
 645 650 655
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<210> 3039

<211> 1836

<212> DNA

<213> Homo sapiens

<400> 3039

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<210> 3040

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3040

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			20					25					30		
Ala	Arg	Ala	Phe	Glu	Asp	Gln	Arg	Val	Ala	Ser	Phe	Cys	Thr	Leu	Thr
		35				40					45				
Asp	Met	Gln	His	Gly	Gln	Asp	Leu	Glu	Gly	Ala	Gln	Glu	Leu	Pro	Leu
	50				55					60					
Cys	Val	Asp	Pro	Gly	Ser	Gly	Lys	Glu	Phe	Met	Asp	Thr	Thr	Gly	Glu
65				70				75						80	
Arg	Ser	Pro	Ser	Pro	Leu	Thr	Gly	Lys	Val	Asn	Gln	Leu	Glu	Leu	Ile

				85						90					95				
Leu	Arg	Gln	Leu	Gln	Thr	Asp	Leu	Arg	Lys	Glu	Lys	Gln	Asp	Lys	Ala				
			100																
Gly	Leu	Gln	Ala	Glu	Val	Gln	His	Leu	Arg	Gln	Asp	Asn	Met	Arg	Leu				
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<210> 3041

<211> 1512

<212> DNA

<213> Homo sapiens

<400> 3041

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<210> 3042

<211> 360

<212> PRT

<213> Homo sapiens

<400> 3042

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Ile	Leu	Leu	His	Gln	Val	Glu	Ala	Leu	Ala	Ala	Ala	Gly	Val	Asp	His	35	40	45	
Val	Ile	Leu	Ala	Val	Ser	Tyr	Met	Ser	Gln	Val	Leu	Glu	Lys	Glu	Met	50	55	60	
Lys	Ala	Gln	Glu	Gln	Arg	Leu	Gly	Ile	Arg	Ile	Ser	Met	Ser	His	Glu	65	70	75	80
Glu	Glu	Pro	Leu	Gly	Thr	Ala	Gly	Pro	Leu	Ala	Leu	Ala	Arg	Asp	Leu	85	90	95	
Leu	Ser	Glu	Thr	Ala	Asp	Pro	Phe	Phe	Val	Leu	Asn	Ser	Asp	Val	Ile	100	105	110	
Cys	Asp	Phe	Pro	Phe	Gln	Ala	Met	Val	Gln	Phe	His	Arg	His	His	Gly	115	120	125	
Gln	Glu	Gly	Ser	Ile	Leu	Val	Thr	Lys	Val	Glu	Glu	Pro	Ser	Lys	Tyr	130	135	140	
Gly	Val	Val	Val	Cys	Glu	Ala	Asp	Thr	Gly	Arg	Ile	His	Arg	Phe	Val	145	150	155	160
Glu	Lys	Pro	Gln	Val	Phe	Val	Ser	Asn	Lys	Ile	Asn	Ala	Gly	Met	Tyr	165	170	175	
Ile	Leu	Ser	Pro	Ala	Val	Leu	Arg	Arg	Ile	Gln	Leu	Gln	Pro	Thr	Ser	180	185	190	
Ile	Glu	Lys	Glu	Val	Phe	Pro	Ile	Met	Ala	Lys	Glu	Gly	Gln	Leu	Tyr	195	200	205	
Ala	Met	Glu	Leu	Gln	Gly	Phe	Trp	Met	Asp	Ile	Gly	Gln	Pro	Lys	Asp	210	215	220	
Phe	Leu	Thr	Gly	Met	Cys	Leu	Phe	Leu	Gln	Ser	Leu	Arg	Gln	Lys	Gln	225	230	235	240
Pro	Glu	Arg	Leu	Cys	Ser	Gly	Pro	Gly	Ile	Val	Gly	Asn	Val	Leu	Val	245	250	255	
Asp	Pro	Ser	Ala	Arg	Ile	Gly	Gln	Asn	Cys	Ser	Ile	Gly	Pro	Asn	Val	260	265	270	
Ser	Leu	Gly	Pro	Gly	Val	Val	Val	Glu	Asp	Gly	Val	Cys	Ile	Arg	Arg				

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 290 295 300
 Ser Cys Ile Val Gly Trp Arg Cys Arg Val Gly Gln Trp Val Arg Met
 305 310 315 320
 Glu Asn Val Thr Val Leu Gly Glu Asp Val Ile Val Asn Asp Glu Leu
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 Val Pro Glu Pro Arg Ile Ile Met
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<210> 3043
 <211> 394
 <212> DNA
 <213> Homo sapiens

<400> 3043
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 240
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 300
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<210> 3044
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 3044
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 35 40 45
 Asn Asp Thr Gln Pro Glu Asp Pro Lys Thr Gly Ser Pro Leu Lys Cys
 50 55 60
 Gln Arg His Val Ser Trp Ser Glu Val Arg Glu Ala Asp Ser Gly Leu
 65 70 75 80
 Leu Leu Gly Gln Thr Pro Val Lys Arg Lys Arg Trp His His Glu Thr
 85 90 95
 Ser Ser Phe Ser Pro Cys Leu Trp Leu Lys Ala Arg Ala Ser Arg Ser
 100 105 110
 Lys Glu Ile

115

<210> 3045
 <211> 605
 <212> DNA
 <213> Homo sapiens

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 120
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 605

<210> 3046
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 3046
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 Cys Met Ala Phe Asn Thr Ser Gly Met Leu Leu Val Thr Thr Asp Thr
 35 40 45
 Leu Gly His Asp Phe His Val Phe Gln Ile Leu Thr His Pro Trp Ser
 50 55 60
 Ser Ser Thr Glu Arg Arg Gln Arg
 65 70

<210> 3047
 <211> 391
 <212> DNA
 <213> Homo sapiens

<400> 3047

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 240
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<210> 3048
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 3048
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 20 25 30
 Leu Val Glu Ser Gly Ile Gln Phe Met Asp Glu Pro Glu Met Ala Val
 35 40 45
 Phe Leu Gln Asn Ala Lys Thr Leu Leu Lys Lys Ile Ser Glu Ala Ser
 50 55 60
 Lys Ala Phe Gln Met Glu Lys Ile Glu His Gly Tyr Glu Asn Met Asn
 65 70 75 80
 His Phe Thr Val Asn Leu Asn Arg Glu Glu Lys Ile Ile Arg Glu Ile
 85 90 95
 Asp Phe Tyr Arg Glu Asp Glu Asp Glu Glu Glu Glu Gly Gly Glu
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<210> 3049
 <211> 599
 <212> DNA
 <213> Homo sapiens

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<210> 3050

<211> 177

<212> PRT

<213> Homo sapiens

<400> 3050

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			20					25					30		
Thr	Ile	Lys	Glu	Glu	Lys	Ser	Ile	Leu	Tyr	Leu	Glu	Gly	Ser	Ala	Leu
		35				40						45			
Val	Phe	Glu	Asp	Ile	Phe	Arg	Leu	Ile	Ala	Phe	Tyr	Cys	Val	Ser	Arg
	50				55					60					
Asp	Leu	Leu	Pro	Phe	Thr	Leu	Arg	Leu	Pro	Gln	Ala	Ile	Leu	Glu	Ala
65					70					75					80
Ser	Ser	Phe	Thr	Asp	Leu	Glu	Thr	Ile	Ala	Asn	Leu	Gly	Leu	Gly	Phe
				85					90					95	
Trp	Asp	Ser	Ser	Leu	Asn	Pro	Pro	Gln	Glu	Arg	Gly	Lys	Pro	Ala	Glu
			100					105					110		
Pro	Pro	Arg	Asp	Arg	Ala	Pro	Gly	Phe	Pro	Leu	Val	Ser	Ser	Leu	Arg
		115					120					125			
Pro	Thr	Ala	His	Asp	Ala	Asn	Cys	Ala	Cys	Glu	Ile	Glu	Leu	Ser	Val
		130				135						140			
Gly	Asn	Asp	Arg	Leu	Trp	Phe	Val	Asn	Pro	Ile	Phe	Ile	Glu	Asp	Cys
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Arg

<210> 3051

<211> 820

<212> DNA

<213> Homo sapiens

<400> 3051

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<210> 3052

<211> 62

<212> PRT

<213> Homo sapiens

<400> 3052

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			20					25					30		
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<210> 3053

<211> 2625

<212> DNA

<213> Homo sapiens

<400> 3053

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1920

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<211> 417

<212> PRT

<213> Homo sapiens

<400> 3054

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			20					25					30		
Thr	Val	Lys	Asp	Gly	Leu	Ser	Leu	Gln	Phe	Lys	Arg	Phe	Arg	Glu	Thr
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Val	Pro	Thr	Trp	Asp	Thr	Ile	Arg	Asp	Glu	Glu	Asp	Val	Leu	Asp	Glu
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Gly	Ile	Ser	Leu	Asn	Ile	Pro	Ala	Pro	Gln	Pro	Val	Cys	Ile	Ser	Glu
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Lys	Gln	Glu	Asn	Asp	Val	Ile	Asn	Ala	Ile	Leu	Lys	Gln	His	Thr	Glu
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	115						120				125				
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Arg	Arg	Ser	Phe	His	Leu	Leu	Lys	Lys	Asn	Glu	Lys	Leu	Leu	Arg	Glu
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			340				345					350					
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	355					360				365							
Pro	Leu	Tyr	Gln	Asn	Phe	Tyr	Glu	Glu	Arg	Ala	Arg	Tyr	Leu	Gln	Thr		
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<210> 3055

<211> 905

<212> DNA

<213> Homo sapiens

<400> 3055

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<210> 3056

<211> 195

<212> PRT

<213> Homo sapiens

<400> 3056

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			20					25					30		
Cys	Ile	Phe	Tyr	Asp	Glu	Asn	Thr	Lys	His	Tyr	Glu	Leu	Leu	Asn	Tyr
	35						40				45				
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	50					55				60					
Ser	Glu	Lys	Thr	Pro	Pro	Thr	Pro	Pro	Ser	Ser	Ile	Val	Ala	Lys	Val
65					70					75				80	
Gln	Ser	Val	Ile	Arg	Arg	Arg	Arg	His	Gln	Lys	Gln	Asp	Glu	Glu	Pro
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			100				105					110			
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	130					135				140					
Lys	Leu	Gly	Cys	Leu	Gln	Phe	Val	Phe	Ser	Ile	Thr	Glu	Phe	Ala	Thr
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Lys	Gln	Pro	Lys	Gly	Asp	Ala	Ser	Leu	Leu	Gln	Asp	Gly	Val	Leu	Ala
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<210> 3057

<211> 2169

<212> DNA

<213> Homo sapiens

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<211> 298

<212> PRT

<213> Homo sapiens

<400> 3058

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<210> 3059

<211> 1411

<212> DNA

<213> Homo sapiens

<400> 3059

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1020

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<210> 3060

<211> 334

<212> PRT

<213> Homo sapiens

<400> 3060

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Arg	Ser	Trp	Ser	Arg	Asp	Leu	Gln	Pro	Arg	Ser	His	Ser	Tyr	Asp	Arg	50	55	60	
Arg	Arg	Arg	His	Arg	Ser	Ser	Ser	Ser	Ser	Ser	Tyr	Gly	Ser	Arg	Arg	65	70	75	80
Lys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Gly	Arg	Gly	Lys	Ser	Tyr	Arg	Val	85	90	95	
Gln	Arg	Ser	Arg	Ser	Lys	Ser	Arg	Thr	Arg	Arg	Ser	Arg	Ser	Arg	Pro	100	105	110	
Arg	Leu	Arg	Ser	His	Ser	Arg	Ser	Ser	Glu	Arg	Ser	Ser	His	Arg	Arg	115	120	125	
Thr	Arg	Ser	Arg	Ser	Arg	Asp	Arg	Glu	Arg	Arg	Lys	Gly	Arg	Asp	Lys	130	135	140	
Glu	Lys	Arg	Glu	Lys	Glu	Lys	Asp	Lys	Gly	Lys	Asp	Lys	Glu	Leu	His	145	150	155	160
Asn	Ile	Lys	Arg	Gly	Glu	Ser	Gly	Asn	Ile	Lys	Ala	Gly	Leu	Glu	His	165	170	175	
Leu	Pro	Pro	Ala	Glu	Gln	Ala	Lys	Ala	Arg	Leu	Gln	Leu	Val	Leu	Glu	180	185	190	
Ala	Ala	Ala	Lys	Ala	Asp	Glu	Ala	Leu	Lys	Ala	Lys	Glu	Arg	Asn	Glu	195	200	205	
Glu	Glu	Ala	Lys	Arg	Arg	Lys	Glu	Glu	Asp	Gln	Ala	Thr	Leu	Val	Glu	210	215	220	
Gln	Val	Lys	Arg	Val	Lys	Glu	Ile	Glu	Ala	Ile	Glu	Ser	Asp	Ser	Phe	225	230	235	240
Val	Gln	Gln	Thr	Phe	Arg	Ser	Ser	Lys	Glu	Val	Lys	Lys	Ser	Val	Glu	245	250	255	
Pro	Ser	Glu	Val	Lys	Gln	Ala	Thr	Ser	Thr	Ser	Gly	Pro	Ala	Ser	Ala				

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<210> 3062
<211> 146
<212> PRT
<213> Homo sapiens

<400> 3062
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35 40 45
Gly Gly Thr Pro Ala Phe Leu Pro Ser Ser Leu Ser Pro Gln Ser Ser
50 55 60
Leu Pro Ala Ser Arg Ala Leu Ala Thr Pro Pro Lys Leu His Thr Cys
65 70 75 80
Glu Lys Cys Ser Thr Ser Ile Ala Asn Gln Ala Val Arg Ile Gln Glu
85 90 95
Gly Arg Tyr Arg His Pro Gly Cys Tyr Thr Cys Ala Asp Cys Gly Leu
100 105 110
Asn Leu Lys Met Arg Gly His Phe Trp Val Gly Asp Glu Leu Tyr Cys
115 120 125
Glu Lys His Ala Arg Gln Arg Tyr Ser Ala Pro Ala Thr Leu Ser Ser
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Arg Ala
145

<210> 3063
<211> 386
<212> DNA
<213> Homo sapiens

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<210> 3064

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3064

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			20					25					30		
Tyr	Gln	Cys	Ser	Arg	Pro	Ala	Pro	Leu	His	Ser	Arg	Asp	Leu	His	Ser
			35				40					45			
Met	Ile	Val	Ala	Ala	Phe	Gln	Cys	Leu	Cys	Val	Trp	Leu	Thr	Glu	His
	50					55					60				
Pro	Asp	Met	Leu	Asp	Glu	Lys	Asp	Tyr	Leu	Lys	Glu	Val	Leu	Glu	Ile
65					70					75				80	
Val	Glu	Leu	Gly	Ile	Ser	Gly	Ser	Lys	Ser	Lys	Asn	Asn	Glu	Gln	Glu
				85				90						95	
Val	Lys	Tyr	Lys	Gly	Asp	Lys	Glu	Pro	Asn	Pro	Ala	Ser	Met	Arg	Val
			100					105					110		
Lys	Asp	Ala	Ala	Glu	Ala	Thr	Leu	Thr	Trp	Tyr	Gly	Ser	Asp	Arg	Thr
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<210> 3065

<211> 2104

<212> DNA

<213> Homo sapiens

<400> 3065

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 120
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 180
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 240
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 360
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 420
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2100

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2104

<210> 3066
<211> 183
<212> PRT
<213> Homo sapiens

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35 40 45
Pro Val Gly Glu Glu Ser Ile Ser Asp Ala Glu Lys Val Ala Met Xaa
50 55 60
Ser Gln Gly Pro Xaa Thr Ala Pro Gly Ser Pro Cys Arg Ser Cys Gly
65 70 75 80
Thr Cys Cys Thr Arg Gly Thr Xaa Leu Lys Ser Lys Val Phe Leu Leu
85 90 95
Gln Glu Glu Leu Ala Tyr Tyr Lys Ser Glu Glu Met Glu Glu Glu Asn
100 105 110
Arg Ile Pro Gln Pro Pro Pro Ile Ala His Pro Arg Thr Ser Pro Gln
115 120 125
Pro Glu Ser Gly Ile Lys Arg Leu Phe Ser Phe Phe Ser Arg Asp Lys
130 135 140
Lys Arg Leu Ala Asn Thr Gln Arg Asn Val His Ile Gln Glu Ser Phe
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<210> 3067
<211> 645
<212> DNA
<213> Homo sapiens

<400> 3067
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120
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240
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420

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 645

<210> 3068

<211> 204

<212> PRT

<213> Homo sapiens

<400> 3068

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Pro	Pro	Ala	Ala	Met	Ser	Gly	Ser	Pro	Ala	Pro	Lys	Ala	Gly	Tyr	Ala
		20					25					30			
Ser	Pro	Asn	Arg	Ala	Gln	Gly	Pro	Ser	Xaa	Val	Leu	Val	His	Gln	Ala
		35				40					45				
Arg	Glu	Pro	Thr	Ala	Gly	Ser	Pro	Pro	Cys	Ser	Leu	Pro	Arg	Pro	Asp
	50				55				60						
Leu	Gln	Pro	Pro	Ser	Thr	Pro	Pro	Pro	Pro	Val	His	Lys	Glu	Gln	Lys
65				70					75				80		
Lys	Ser	Asp	Pro	Pro	Pro	Pro	Pro	Gly	Lys	Phe	Lys	Ser	Phe	Leu	
			85					90				95			
Pro	Pro	Arg	Ser	Pro	Gly	Asn	Ser	Ala	Leu	Gly	Pro	Arg	Arg	Gly	Trp
		100				105					110				
Gly	Trp	Ile	Ala	Ala	Gly	Gly	Ala	Pro	Ala	Met	Pro	Arg	Pro	Pro	Ser
	115					120					125				
Gly	Ala	Gly	Asp	Arg	Glu	Ile	Pro	Arg	Asp	Leu	Ala	Cys	Ala	Pro	Tyr
	130				135				140						
Pro	Pro	Pro	Gly	Ala	Gly	Arg	Gly	Ser	Glu	His	Arg	Ser	Ala	Pro	Gly
145				150				155					160		
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			165			170					175				
Ser	Pro	Ala	Glu	Glu	Pro	Pro	Pro	Val	Ser	Ala	Glu	Glu	Thr	Pro	
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<210> 3069

<211> 1561

<212> DNA

<213> Homo sapiens

<400> 3069

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 180

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300
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360
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420
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<210> 3070

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3070

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           35           40           45
Tyr Phe Gln Val Leu Cys Val Ala Asp Val Val Ile Ser Thr Ala Lys
           50           55           60
His Glu Phe Phe Gly Val Ala Met Leu Glu Ala Val Tyr Cys Gly Cys
65           70           75           80
Tyr Pro Leu Cys Pro Lys Asp Leu Val Tyr Pro Glu Ile Phe Pro Ala
           85           90           95
Glu Tyr Leu Tyr Ser Thr Pro Glu Gln Leu Ser Lys Arg Leu Gln Asn
           100          105          110
Phe Cys Lys Arg Pro Asp Ile Ile Arg Lys His Leu Tyr Lys Gly Glu
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<210> 3071

<211> 3343

<212> DNA

<213> Homo sapiens

<400> 3071

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780

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<210> 3072

<211> 349

<212> PRT

<213> Homo sapiens

<400> 3072

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Pro	Arg	Leu	Leu	Ser	Gly	Pro	Ser	Gln	Glu	Ser	Pro	Gln	Thr	Leu	Gly
			20					25					30		
Lys	Glu	Ser	Arg	Gly	Leu	Arg	Gln	Gln	Gly	Thr	Ser	Val	Ala	Gln	Ser
			35				40					45			
Gly	Ala	Gln	Ala	Pro	Gly	Arg	Ala	His	Arg	Cys	Ala	His	Cys	Arg	Arg
			50			55					60				
His	Phe	Pro	Gly	Trp	Val	Ala	Leu	Trp	Leu	His	Thr	Arg	Arg	Cys	Gln
65					70				75					80	
Ala	Arg	Leu	Pro	Leu	Pro	Cys	Pro	Glu	Cys	Gly	Arg	Arg	Phe	Arg	His
				85				90						95	
Ala	Pro	Phe	Leu	Ala	Leu	His	Arg	Gln	Val	His	Ala	Ala	Ala	Thr	Pro
			100					105						110	
Asp	Leu	Gly	Phe	Ala	Cys	His	Leu	Cys	Gly	Gln	Ser	Phe	Arg	Gly	Trp

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      115              120              125
Val Ala Leu Val Leu His Leu Arg Ala His Ser Ala Ala Lys Arg Pro
      130              135              140
Ile Ala Cys Pro Lys Cys Glu Arg Arg Phe Trp Arg Arg Lys Gln Leu
      145              150              155              160
Arg Ala His Leu Arg Arg Cys His Pro Pro Ala Pro Glu Ala Arg Pro
      165              170              175
Phe Ile Cys Gly Asn Cys Gly Arg Ser Phe Ala Gln Trp Asp Gln Leu
      180              185              190
Val Ala His Lys Arg Val His Val Ala Glu Ala Leu Glu Glu Ala Ala
      195              200              205
Ala Lys Ala Leu Gly Pro Arg Pro Arg Gly Arg Pro Ala Val Thr Ala
      210              215              220
Pro Arg Pro Gly Gly Asp Ala Val Asp Arg Pro Phe Gln Cys Ala Cys
      225              230              235              240
Cys Gly Lys Arg Phe Arg His Lys Pro Asn Leu Ile Ala His Arg Arg
      245              250              255
Val His Thr Gly Glu Arg Pro His Gln Cys Pro Glu Cys Gly Lys Arg
      260              265              270
Phe Thr Asn Lys Pro Tyr Leu Thr Ser His Arg Arg Ile His Thr Gly
      275              280              285
Glu Lys Pro Tyr Pro Cys Lys Glu Cys Gly Arg Arg Phe Arg His Lys
      290              295              300
Pro Asn Leu Leu Ser His Ser Lys Ile His Xaa Ser Asp Pro Arg Gly
      305              310              315              320
Arg Pro Arg Pro Pro Pro Ala Arg Gly Ala Pro Ser Cys Gln Pro Ala
      325              330              335
Pro Arg Ser Pro Arg Pro Ser Pro Pro Arg Arg Tyr Leu
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<210> 3073

<211> 791

<212> DNA

<213> Homo sapiens

<400> 3073

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120
gccggagggg ccggggcggg ggccgcgccc ggaccgcac tccccccacg ggggtcggtg
180
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300
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420
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540

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<210> 3074

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3074

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Arg	Gly	His	Glu	Arg	Phe	Arg	Ile	Ala	Ser	Ala	Cys	Leu	Asp	Glu	Leu
			20					25					30		
Ser	Cys	Glu	Phe	Leu	Leu	Ala	Gly	Ala	Gly	Gly	Ala	Gly	Ala	Gly	Ala
		35					40					45			
Ala	Pro	Gly	Pro	His	Leu	Pro	Arg	Gly	Ser	Val	Pro	Gly	Asp	Pro	
	50					55				60					
Val	Arg	Ile	His	Cys	Asn	Ile	Thr	Glu	Ser	Tyr	Pro	Ala	Val	Pro	Pro
65					70					75					80
Ile	Trp	Ser	Val	Glu	Ser	Asp	Asp	Pro	Asn	Leu	Ala	Ala	Val	Leu	Glu
				85					90					95	
Arg	Leu	Val	Asp	Ile	Lys	Lys	Gly	Asn	Thr	Leu	Leu	Leu	Gln	His	Leu
			100					105						110	
Lys	Arg	Ile	Ile	Ser	Asp	Leu	Cys	Lys	Leu	Tyr	Asn	Leu	Pro	Gln	His
		115				120						125			
Pro	Asp	Val	Glu	Met	Leu	Asp	Gln	Pro	Leu	Pro	Ala	Glu	Gln	Cys	Thr
	130					135					140				
Gln	Glu	Asp	Val	Ser	Ser	Glu	Asp	Glu	Asp	Glu	Glu	Met	Pro	Glu	Asp
145					150					155				160	
Thr	Glu	Asp	Leu	Asp	His	Tyr	Glu	Met	Lys	Glu	Glu	Glu	Pro	Ala	Glu
			165					170						175	
Gly	Lys	Lys	Ser	Glu	Asp	Asp	Gly	Ile	Gly	Lys	Glu	Asn	Leu	Ala	Ile
			180					185					190		
Leu	Glu	Lys	Ile	Lys	Lys	Asn	Gln	Arg	Gln	Asp	Tyr	Leu	Asn	Gly	Ala
	195					200					205				
Val	Ser	Gly	Ser	Val	Gln	Ala	Thr	Asp	Arg	Leu	Met	Lys	Glu	Leu	Gln
	210					215				220					
Gly	Tyr	Ile	Thr	Xaa	Ser	Gln	Ser	Phe	Lys	Gly	Gly	Asn	Tyr	Xaa	Ser
225					230					235				240	
Ser	Asn	Ser	Trp	Asn	Asp	Ser	Leu	Tyr	Gly	Trp	Asp	Val	Gln	Leu	Leu
			245					250					255		
Lys	Val	Asp	Gln	Gly	Ser	Val									
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<210> 3075

<211> 603

<212> DNA

<213> Homo sapiens

<400> 3075

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180
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240
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300
tatgatgctt ttgagagcaa gagcagcttc actctgatca tggagtatgt ggatggaggg
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420
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480
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<210> 3076

<211> 201

<212> PRT

<213> Homo sapiens

<400> 3076

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20      25      30
Val Gly Pro Gln Lys Lys Lys Lys Lys Lys Lys Val Leu Gly Gly
35      40      45
Gly Arg Phe Gly Gln Val His Arg Cys Thr Glu Lys Ser Thr Gly Leu
50      55      60
Ala Leu Ala Ala Lys Ile Lys Val Lys Asn Val Lys Asp Arg Glu
65      70      75      80
Asp Val Lys Asn Glu Val Asn Ile Met Asn Gln Leu Ser His Val Asn
85      90      95
Leu Ile Gln Leu Tyr Asp Ala Phe Glu Ser Lys Ser Ser Phe Thr Leu
100     105     110
Ile Met Glu Tyr Val Asp Gly Gly Glu Leu Phe Asp Arg Ile Thr Asp
115     120     125
Glu Lys Tyr His Leu Thr Glu Leu Asp Val Val Leu Phe Thr Arg Gln
130     135     140
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Asp Leu Lys Pro Glu Asn Ile Leu Cys Val Ser Gln Thr Gly His Gln

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180						
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240						
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300						
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360						
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420						
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540						
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1260						

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<210> 3078
 <211> 310
 <212> PRT
 <213> Homo sapiens

<400> 3078

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Val	Gly	Ala	Leu	Pro	Arg	Gly	Pro	Arg	Gln	Asn	Ser	Arg	Leu	Gly	Leu	35	40	45	
Pro	Leu	Leu	Leu	Met	Pro	Glu	Glu	Ala	Arg	Leu	Leu	Ala	Glu	Ile	Gly	50	55	60	
Ala	Val	Thr	Leu	Val	Ser	Ala	Pro	Arg	Pro	Asp	Ser	Arg	His	His	Ser	65	70	75	80
Leu	Ala	Leu	Thr	Ser	Phe	Lys	Arg	Gln	Gln	Glu	Glu	Ser	Phe	Gln	Glu	85	90	95	
Gln	Ser	Ala	Leu	Ala	Ala	Glu	Ala	Arg	Glu	Thr	Arg	Arg	Gln	Glu	Leu	100	105	110	
Leu	Glu	Lys	Ile	Thr	Glu	Gly	Gln	Ala	Ala	Lys	Lys	Gln	Lys	Leu	Glu	115	120	125	
Gln	Ala	Ser	Gly	Ala	Ser	Ser	Ser	Gln	Glu	Ala	Gly	Ser	Ser	Gln	Ala	130	135	140	
Ala	Lys	Glu	Asp	Glu	Thr	Ser	Asp	Gly	Gln	Ala	Ser	Gly	Glu	Gln	Glu	145	150	155	160
Glu	Ala	Gly	Pro	Ser	Ser	Ser	Gln	Ala	Gly	Pro	Ser	Asn	Gly	Val	Ala	165	170	175	
Pro	Leu	Pro	Arg	Ser	Ala	Leu	Leu	Val	Gln	Leu	Ala	Thr	Ala	Arg	Pro	180	185	190	
Arg	Pro	Val	Lys	Ala	Arg	Pro	Leu	Asp	Trp	Arg	Val	Gln	Ser	Lys	Asp	195	200	205	
Trp	Pro	His	Ala	Gly	Arg	Pro	Ala	His	Glu	Leu	Arg	Tyr	Ser	Ile	Tyr	210	215	220	
Arg	Asp	Leu	Trp	Glu	Arg	Gly	Phe	Phe	Leu	Ser	Ala	Ala	Gly	Lys	Phe	225	230	235	240
Gly	Gly	Asp	Phe	Leu	Val	Tyr	Pro	Gly	Asp	Pro	Leu	Arg	Phe	His	Ala	245	250	255	
His	Tyr	Ile	Ala	Gln	Cys	Trp	Ala	Pro	Glu	Asp	Thr	Ile	Pro	Leu	Gln	260	265	270	
Asp	Leu	Val	Ala	Ala	Gly	Arg	Leu	Gly	Thr	Ser	Val	Arg	Lys	Thr	Leu	275	280	285	
Leu	Leu	Cys	Ser	Pro	Gln	Pro	Asp	Gly	Lys	Val	Val	Tyr	Thr	Ser	Leu	290	295	300	
Gln	Trp	Ala	Ser	Leu	Gln											305	310		

<210> 3079
 <211> 1785

<212> DNA

<213> Homo sapiens

<400> 3079

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<210> 3080
<211> 500
<212> PRT
<213> Homo sapiens
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2297

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      325              330              335
Leu Ala Leu Asn Leu His Leu Pro Ala Ala Asp Gln Asn Val Ile Met
      340              345              350
Ala Ala Leu Ser Lys His Ala Asn Val Lys Ile Phe Ser Glu Lys Leu
      355              360              365
Leu Leu Leu Leu Asn Arg Gly Asp Asp Pro Val Arg Ile Phe Lys His
      370              375              380
Glu Pro Gln Pro Pro His Ser Val Leu Lys Phe Leu Gln Asp Val Phe
385              390              395              400
Gly Ser Pro Ala Thr Ala Ala Ile Phe Tyr His Thr Asp Met Met Ala
      405              410              415
Leu Ile Asp Ile Thr Val Arg His Ile Ala Asp Leu Ser Pro Gly Asp
      420              425              430
Lys Gly Pro Phe Gly Ala Gly Gln Arg Pro Trp Pro Gly Val Pro Arg
      435              440              445
Leu Leu Glu Pro Gly Ser Thr Pro Ser Arg Glu Pro His Pro Val Glu
      450              455              460
Arg Ser Gly Val Pro Ala Leu Thr Ser Ser Trp Ala Ser Gly Cys Pro
465              470              475              480
Arg Pro Leu His Pro Ala Leu Gln Leu Val Ile Asp Ser Ala Phe Gly
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Gly Arg Ser Val
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<210> 3081

<211> 1902

<212> DNA

<213> Homo sapiens

<400> 3081

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120
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 agggccgcgc gtgaatggga cgggttccca cacggacacc ctccagcact tgccgttccc
 1740
 gaccggcct gggttccggg gcctgcgtct gtggaaagg tccatgtgcg cacaacggtg
 1800
 accggcggt cccgggcgc tcagtcctgg acaggagcct ccaccacagg ctgtgtgaat
 1860
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 1902

<210> 3082

<211> 414

<212> PRT

<213> Homo sapiens

<400> 3082

Met Asp Asp Met Gly Leu Val Ala Lys Ala Cys Gly Cys Pro Leu Tyr
 1 5 10 15
 Trp Lys Gly Pro Leu Phe Tyr Gly Ala Gly Gly Glu Arg Thr Gly Ser

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      20      25      30
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      35      40      45
Cys His Asp Asp Ala Ala Lys Phe Val His Leu Leu Met Ser Pro Gly
      50      55      60
Cys Asn Tyr Leu Val Gln Glu Asp Phe Val Pro Phe Leu Gln Asp Val
      65      70      75      80
Val Asn Thr His Pro Gly Leu Ser Phe Leu Lys Glu Ala Ser Glu Phe
      85      90      95
His Ser Arg Tyr Ile Thr Thr Val Ile Gln Arg Ile Phe Tyr Ala Val
      100      105      110
Asn Arg Ser Trp Ser Gly Arg Ile Thr Cys Ala Glu Leu Arg Arg Ser
      115      120      125
Ser Phe Leu Gln Asn Val Ala Leu Leu Glu Glu Glu Ala Asp Ile Asn
      130      135      140
Gln Leu Thr Glu Phe Phe Ser Tyr Glu His Phe Tyr Val Ile Tyr Cys
      145      150      155      160
Lys Phe Trp Glu Leu Asp Thr Asp His Asp Leu Leu Ile Asp Ala Asp
      165      170      175
Asp Leu Ala Arg His Asn Asp His Ala Leu Ser Thr Lys Met Ile Asp
      180      185      190
Arg Ile Phe Ser Gly Ala Val Thr Arg Gly Arg Lys Val Gln Lys Glu
      195      200      205
Gly Lys Ile Ser Tyr Ala Asp Phe Val Trp Phe Leu Ile Ser Glu Glu
      210      215      220
Asp Lys Lys Thr Pro Thr Ser Ile Glu Tyr Trp Phe Arg Cys Met Asp
      225      230      235      240
Leu Asp Gly Asp Gly Ala Leu Ser Met Phe Glu Leu Glu Tyr Phe Tyr
      245      250      255
Glu Glu Gln Cys Arg Arg Leu Asp Ser Met Ala Ile Glu Ala Leu Pro
      260      265      270
Phe Gln Asp Cys Leu Cys Gln Met Leu Asp Leu Val Lys Pro Arg Thr
      275      280      285
Glu Gly Lys Ile Thr Leu Gln Asp Leu Lys Arg Cys Lys Leu Ala Asn
      290      295      300
Val Phe Phe Asp Thr Phe Phe Asn Ile Glu Lys Tyr Leu Asp His Glu
      305      310      315      320
Gln Lys Glu Gln Ile Ser Leu Leu Arg Asp Gly Asp Ser Gly Gly Pro
      325      330      335
Glu Leu Ser Asp Trp Glu Lys Tyr Ala Ala Glu Glu Tyr Asp Ile Leu
      340      345      350
Val Ala Glu Glu Thr Val Gly Glu Pro Trp Glu Asp Gly Phe Glu Ala
      355      360      365
Glu Leu Ser Pro Val Glu Gln Lys Leu Ser Ala Leu Arg Ser Pro Leu
      370      375      380
Ala Gln Arg Pro Phe Phe Glu Ala Pro Ser Pro Leu Gly Ala Val Asp
      385      390      395      400
Leu Tyr Glu Tyr Ala Cys Gly Asp Glu Asp Leu Glu Pro Leu
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<210> 3083

<211> 610

<212> DNA

<213> Homo sapiens

<400> 3083

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 180
 agcatccccg gcaagcacta ccaggctgtg ggtctgcacc tctggaaggt agagaagcgg
 240
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 300
 tacgaccggg aggtccacct gcgttgtgag ctctcaccgg gctactacct ggctgtcccc
 360
 agcaccttcc tgaaggacgc gccaggggag ttctgtctcc gagtcttctc taccgggcga
 420
 gtctccctta ggtgagagga accgcgcagt gctgctggct ctccgaggcc acaggccctt
 480
 ccaaggcagg atttgggcac tttccctctg tgggtggcag gtgtccatgt gggaaactgag
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 gcagtggcca
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<210> 3084

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3084

Xaa	Arg	Pro	Ser	Cys	Trp	Glu	Pro	Val	Arg	Pro	Ser	Gly	Ser	Ser	His
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Leu	Ser	Trp	His	Arg	Gly	Pro	Pro	Cys	Glu	Val	Tyr	Ile	Ala	Val	Leu
			20					25					30		
Gln	Arg	Ser	Arg	Leu	His	Ala	Ala	Asp	Trp	Ala	Gly	Arg	Ala	Arg	Ala
		35				40					45				
Leu	Val	Gly	Asp	Ser	His	Thr	Ser	Trp	Ser	Pro	Ala	Ser	Ile	Pro	Gly
	50				55					60					
Lys	His	Tyr	Gln	Ala	Val	Gly	Leu	His	Leu	Trp	Lys	Val	Glu	Lys	Arg
65				70					75					80	
Arg	Val	Asn	Leu	Pro	Arg	Val	Leu	Ser	Met	Pro	Pro	Val	Ala	Gly	Thr
			85					90						95	
Ala	Cys	His	Ala	Tyr	Asp	Arg	Glu	Val	His	Leu	Arg	Cys	Glu	Leu	Ser
		100					105					110			
Pro	Gly	Tyr	Tyr	Leu	Ala	Val	Pro	Ser	Thr	Phe	Leu	Lys	Asp	Ala	Pro
		115					120					125			
Gly	Glu	Phe	Leu	Leu	Arg	Val	Phe	Ser	Thr	Gly	Arg	Val	Ser	Leu	Arg
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<210> 3085

<211> 1080

<212> DNA

<213> Homo sapiens

<400> 3085

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 120
 caaaagataa gaaaatggaa attaaggga atctgttcag caacaaagat cttgaggaat
 180
 tatgcagaca tatcaacaac agaaaccaag cagcacagca ttctcagaag cagtctactg
 240
 agctcttcca gtgcatgtac ttcaaagaca aagaccctgc caccgaggag cgttgcatat
 300
 ctgacggagt tatttattca attagaacaa atgggtgtgct tctatttata ccaaggtttg
 360
 ggattaaagg tgctgcttat ctaaaaaata aagatgggtt agtcatctca tgtggcccag
 420
 atagctgttc tgaatggaaa ccaggatccc ttcaacgatt tcaaaacaaa attacctcta
 480
 ctacaacaga tggggaatct gttacgttcc atttgtttga ccatgtaacc gtaagaatat
 540
 ccatacaggc ctcacgttgc cattctgata caatcagact tgaaataatt agtaacaaac
 600
 catacaagat accaaatata gaacttattc atcagagttc ccccttgctg aagagtgagt
 660
 tagtgaaaga agtaactaaa tctgtggaag aagctcagct tgcccaagaa gtcaaagtaa
 720
 acatcattca ggaggaatat caagaatatc gccaaacaaa gggaaggagc ctatacacac
 780
 ttctagagga gatacgggac ctagctctcc tggatgtttc aaacaattat ggaatatgag
 840
 aggctcttac ttcactaaga gctgtcatat gtgaatgttt tacagtcttt tcaaacttaa
 900
 catttaatgt gtgtcactca gtgctctagt cgatcaggac tgggtagcta tttcgcatat
 960
 atgtanaatg ttctcagccg ggcacggtgg ctcacgcctg taaccccagc actttgggag
 1020
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<210> 3086

<211> 58

<212> PRT

<213> Homo sapiens

<400> 3086

Met	Cys	Val	Thr	Gln	Cys	Ser	Ser	Arg	Ser	Gly	Leu	Gly	Ser	Tyr	Phe
1				5				10						15	
Ala	Tyr	Met	Xaa	Asn	Val	Leu	Ser	Arg	Ala	Arg	Trp	Leu	Thr	Pro	Val
			20					25						30	
Thr	Pro	Ala	Leu	Trp	Glu	Ala	Glu	Ala	Gly	Gly	Ser	Arg	Gly	Gln	Glu
		35				40						45			
Ile	Glu	Thr	Ile	Leu	Ala	Asn	Thr	Val	Lys						
	50					55									

<210> 3087
<211> 2329
<212> DNA
<213> Homo sapiens

<400> 3087
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120
gtggaggtgg agccgcccc agatcggcca gtccgagcgt gccggacaca gcagccggaa
180
atggagcgca cccatattca gcaactcctg gaacacttcc tccgccagct tcagagaaaa
240
gatcccatg gattttttgc ttttcctgtc acggatgcaa ttgctcctgg atattcaatg
300
ataataaaaac atcccatgga ttttggcacc atgaaagaca aaattgtagc taatgaatac
360
aagtcagtta cggaatttaa ggcagatttc aagctgatgt gtgataatgc aatgacatac
420
aataggccag ataccgtgta ctacaagttg gcgaagaaga tccttcacgc aggctttaag
480
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540
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660
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720
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780
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840
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900
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960
cagtatttgg cgacttgaag tcggacgaga tggagctgct ctactcagcc tacggagatg
1020
agacaggcgt gcagtgtgcg ctgagcctgc aggagtgtgt gaaggatgct gggagctaca
1080
gcaagaaagt ggtggacgac ctctggacc agatcacagg cggagaccac tctaggacgc
1140
tcttcagct gaagcagaga agaaatgttc ccatgaagcc tccagatgaa gccaaggttg
1200
gggacaccct aggagacagc agcagctctg ttctggagtt catgtcgatg aagtcctatc
1260
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1320
accctgacga cagccatttg aacttggatg agacgacgaa gtcctgcag gacctgcacg
1380
aagcacaggc ggagcgcggc ggctctcggc cgtcgtccaa cctcagctcc ctgtccaacg
1440

cctccgagag ggaccagcac cacctgggaa gcccttctcg cctgagtgtc ggggagcagc
 1500
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 1560
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 1620
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 1800
 gtctctgtac acagccccgt gaaccctgag gagtggagtc atacacgaag ggcgtgtggc
 1860
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 1920
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 1980
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 2160
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 2220
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 2280
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 2329

<210> 3088

<211> 280

<212> PRT

<213> Homo sapiens

<400> 3088

Xaa	Glu	Lys	His	Leu	Asp	Asp	Glu	Glu	Arg	Arg	Lys	Arg	Lys	Glu	Glu
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Lys	Lys	Arg	Lys	Arg	Glu	Arg	Glu	His	Cys	Asp	Thr	Glu	Gly	Glu	Ala
			20					25					30		
Asp	Asp	Phe	Asp	Pro	Gly	Lys	Lys	Val	Glu	Val	Glu	Pro	Pro	Pro	Asp
		35					40					45			
Arg	Pro	Val	Arg	Ala	Cys	Arg	Thr	Gln	Gln	Pro	Glu	Met	Glu	Arg	Thr
		50				55					60				
His	Ile	Gln	Gln	Leu	Leu	Glu	His	Phe	Leu	Arg	Gln	Leu	Gln	Arg	Lys
65				70					75					80	
Asp	Pro	His	Gly	Phe	Phe	Ala	Phe	Pro	Val	Thr	Asp	Ala	Ile	Ala	Pro
			85						90					95	
Gly	Tyr	Ser	Met	Ile	Ile	Lys	His	Pro	Met	Asp	Phe	Gly	Thr	Met	Lys
			100					105					110		
Asp	Lys	Ile	Val	Ala	Asn	Glu	Tyr	Lys	Ser	Val	Thr	Glu	Phe	Lys	Ala
		115					120					125			
Asp	Phe	Lys	Leu	Met	Cys	Asp	Asn	Ala	Met	Thr	Tyr	Asn	Arg	Pro	Asp

130	135	140
Thr Val Tyr Tyr Lys	Leu Ala Lys Lys Ile	Leu His Ala Gly Phe Lys
145	150	155
Met Met Ser Lys	Gln Ala Ala Leu Leu Gly	Asn Glu Asp Thr Ala Val
165	170	175
Glu Glu Pro Val	Pro Glu Val Val Pro	Val Gln Val Glu Thr Ala Lys
180	185	190
Lys Ser Lys Lys	Pro Ser Arg Glu Val	Ile Ser Cys Met Phe Glu Pro
195	200	205
Glu Gly Asn Ala	Cys Ser Leu Thr Asp	Ser Thr Ala Glu Glu His Val
210	215	220
Leu Ala Leu Val	Glu His Ala Ala Asp	Glu Ala Arg Asp Arg Ile Asn
225	230	235
Arg Phe Leu Pro	Gly Gly Lys Met Gly	Tyr Leu Lys Arg Asn Gly Asp
245	250	255
Gly Ser Leu Leu	Tyr Ser Val Val Asn	Thr Ala Glu Pro Asn Ala Asp
260	265	270
Glu Glu Glu Thr	His Pro Val Thr	
275	280	

<210> 3089

<211> 722

<212> DNA

<213> Homo sapiens

<400> 3089

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ncagcttttg accaagcgac catgagaggg ccagagctcg ggcccgaac cagcatggag
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120
gcccttaciaa aggcggcaga ggggtggatta tcttcacctg aattttcaga gctctgtatt
180
tggttaggct ctcaaataaa atcattatgc aacttggaag aaagtatcac gtctgctggg
240
agagatgacc tagagagctt ccagcttgag ataagtgggt ttttaaaga gatggcctgt
300
ccatactcgg tactcgtctc aggagacatt aaagagcgcc tcacaaaga ggatgactgc
360
ttgaaacttc tgttgTTTTT aagtacagaa cttcaagctt tacaatatatt acagaacaag
420
aacataaaaa attctcaatt agataaaaaat agtgaagttt atcaggaagt tcaagctatg
480
tttgatacac ttggtatacc caagtcaaca acttctgaca ttccgcatat gctaaaccaa
540
gtggaatcaa aggtgaaaga tattctctca aagggtccaga aaaatcatgt gggaaaacca
600
ctactgaaaa tggatttaaa ttcagaacag gcggaacaac tggaaagaat caatgatgct
660
ctttcctgtg aatatgagtg ccgcccacga atgttaatga aacgattaga tgtgactgta
720
ca
722

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<210> 3090

<211> 240
 <212> PRT
 <213> Homo sapiens

<400> 3090
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 Thr Ser Met Glu Gly Asp Val Leu Asp Thr Leu Glu Ala Leu Gly Tyr
 20 25 30
 Lys Gly Pro Leu Leu Glu Glu Gln Ala Leu Thr Lys Ala Ala Glu Gly
 35 40 45
 Gly Leu Ser Ser Pro Glu Phe Ser Glu Leu Cys Ile Trp Leu Gly Ser
 50 55 60
 Gln Ile Lys Ser Leu Cys Asn Leu Glu Glu Ser Ile Thr Ser Ala Gly
 65 70 75 80
 Arg Asp Asp Leu Glu Ser Phe Gln Leu Glu Ile Ser Gly Phe Leu Lys
 85 90 95
 Glu Met Ala Cys Pro Tyr Ser Val Leu Val Ser Gly Asp Ile Lys Glu
 100 105 110
 Arg Leu Thr Lys Lys Asp Asp Cys Leu Lys Leu Leu Phe Leu Ser
 115 120 125
 Thr Glu Leu Gln Ala Leu Gln Ile Leu Gln Asn Lys Lys His Lys Asn
 130 135 140
 Ser Gln Leu Asp Lys Asn Ser Glu Val Tyr Gln Glu Val Gln Ala Met
 145 150 155 160
 Phe Asp Thr Leu Gly Ile Pro Lys Ser Thr Thr Ser Asp Ile Pro His
 165 170 175
 Met Leu Asn Gln Val Glu Ser Lys Val Lys Asp Ile Leu Ser Lys Val
 180 185 190
 Gln Lys Asn His Val Gly Lys Pro Leu Leu Lys Met Asp Leu Asn Ser
 195 200 205
 Glu Gln Ala Glu Gln Leu Glu Arg Ile Asn Asp Ala Leu Ser Cys Glu
 210 215 220
 Tyr Glu Cys Arg Arg Arg Met Leu Met Lys Arg Leu Asp Val Thr Val
 225 230 235 240

<210> 3091
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 3091
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 120
 cccagggcga ccccttctgc caagtgtccc aaaatgattg ctaaagtgcct ggctccccca
 180
 ctctttgact ccattctcttg gttccctctt tctgctgcca gctccccga ctcttccctg
 240
 gggactcctt tttgtgtccc ccttctcccc tgcccctact gccaggcaga tccccctttc
 300
 ttccataccc atccctgcct ccctgctcgg ccg
 333

<210> 3092
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 3092
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 Lys Gly Asp Thr Lys Arg Ser Pro Gln Gly Arg Val Gly Gly Ala Gly
 20 25 30
 Ser Arg Lys Arg Glu Pro Arg Asp Gly Val Lys Glu Trp Gly Ser Gln
 35 40 45
 Ala Phe Ser Asn His Phe Gly Thr Leu Gly Arg Arg Gly Arg Pro Gly
 50 55 60
 Gly Thr Lys Gly Leu Gly Cys Ser Leu Ser Val Pro Asp Pro Cys Gln
 65 70 75 80
 Ala Lys Met Val Trp Gln Arg Gly Glu Gln Leu Leu Pro Arg Ala Ser
 85 90 95
 Phe Pro Ser Ala Pro Phe Thr Arg
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<210> 3093
 <211> 720
 <212> DNA
 <213> Homo sapiens

<400> 3093
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 120
 agggggcagc ctgtgggcag tgactctgtc tgtctttgga caggacaagg actgccatcc
 180
 accatggtga agctgggctg cagcttctct gggaagccag gtaaagaccc tggggaccag
 240
 gatggggctg ccatggacag tgtgcctctg atcagcccct tggacatcag ccagctccag
 300
 ccgccactcc ctgaccaggt ggtcatcaag acacagacag aataccagct gtccctccca
 360
 gaccagcaga atttccttga cctggagggc cagaggctga actgcagcca cccagaggaa
 420
 gggcgccaggc tgcccaccgc acggatgac gccttcgcca tggcgctact gggctgcgtg
 480
 ctgatcatgt acaaggccat ctggtacgac cagttcacct gcccgcagcg cttcctgctg
 540
 cggcacaaga tctgcacgcc gctgaccctg gagatgtact acacggagat ggaccccag
 600
 cgccaccgca gcatcctggc ggccatcggg gcctaccgc tgagccgcaa gcacggcacg
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 gagacgccgg cggcctgggg ggacggctac cgcgagcca aggaggagcg caaggggccc
 720

<210> 3094

<211> 179
 <212> PRT
 <213> Homo sapiens

<400> 3094

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Met Val Lys Leu Gly Cys Ser Phe Ser Gly Lys Pro Gly Lys Asp Pro
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Gly Asp Gln Asp Gly Ala Ala Met Asp Ser Val Pro Leu Ile Ser Pro
      20           25           30
Leu Asp Ile Ser Gln Leu Gln Pro Pro Leu Pro Asp Gln Val Val Ile
      35           40           45
Lys Thr Gln Thr Glu Tyr Gln Leu Ser Ser Pro Asp Gln Gln Asn Phe
      50           55           60
Pro Asp Leu Glu Gly Gln Arg Leu Asn Cys Ser His Pro Glu Glu Gly
65           70           75           80
Arg Arg Leu Pro Thr Ala Arg Met Ile Ala Phe Ala Met Ala Leu Leu
      85           90           95
Gly Cys Val Leu Ile Met Tyr Lys Ala Ile Trp Tyr Asp Gln Phe Thr
      100          105          110
Cys Pro Asp Gly Phe Leu Leu Arg His Lys Ile Cys Thr Pro Leu Thr
      115          120          125
Leu Glu Met Tyr Tyr Thr Glu Met Asp Pro Glu Arg His Arg Ser Ile
      130          135          140
Leu Ala Ala Ile Gly Ala Tyr Pro Leu Ser Arg Lys His Gly Thr Glu
145          150          155          160
Thr Pro Ala Ala Trp Gly Asp Gly Tyr Arg Ala Ala Lys Glu Glu Arg
      165          170          175
Lys Gly Pro
  
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<210> 3095
 <211> 519
 <212> DNA
 <213> Homo sapiens

<400> 3095

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gggtgggattt caccggcaca ttcatgtacc catagcgggtg ctcattgcac acgtggacgg
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120
gggtttgacg aggtctttgt catcagcctg gctcgcaggc ctgaccgtcg ggaacgcatg
180
ctcgccctgc tctgggagat ggagatctct gggagggtgg tggatgctgt ggatggctgg
240
atgctcaaca gcagtgccat caggaacctc ggcgtagacc tgctccccggg ctaccaggac
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360
atctgggaag agcgagcagt acaaggcaca cttctggcca cgggacctgg tggccttctc
420
cgcccagccc ctgctcgctg cccctaccca ctatgccggg gacgccgagt ggctcagtga
480
cacggagaca tcctctccat gggatgatgc cagcggccg
519
  
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<210> 3096
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 3096
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 Pro Ser Lys Arg Pro Ser Lys Ile Gly Phe Asp Glu Val Phe Val Ile
 35 40 45
 Ser Leu Ala Arg Arg Pro Asp Arg Arg Glu Arg Met Leu Ala Ser Leu
 50 55 60
 Trp Glu Met Glu Ile Ser Gly Arg Val Val Asp Ala Val Asp Gly Trp
 65 70 75 80
 Met Leu Asn Ser Ser Ala Ile Arg Asn Leu Gly Val Asp Leu Leu Pro
 85 90 95
 Gly Tyr Gln Asp Pro Tyr Ser Gly Arg Thr Leu Thr Lys Gly Glu Val
 100 105 110
 Gly Cys Phe Leu Ser His Tyr Ser Ile Trp Glu Glu Arg Ala Val Gln
 115 120 125
 Gly Thr Leu Leu Ala Thr Gly Pro Gly Gly Leu Leu Arg Pro Ala Pro
 130 135 140
 Ala Arg Cys Pro Tyr Pro Leu Cys Arg Gly Arg Arg Val Ala Gln
 145 150 155

<210> 3097
 <211> 4953
 <212> DNA
 <213> Homo sapiens

<400> 3097
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2325

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Pro	Gly	Val	Leu	Glu	Arg	Val	Glu	Arg	Leu	Lys	Gln	Asp	Leu	Leu	Asp				
705				710						715					720				
Lys	Val	Arg	Arg	Leu	Gly	Arg	Glu	Leu	Pro	Val	Asn	Thr	Leu	Asp	Glu				
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Leu	Ile	Asp	Gln	Leu	Gly	Gly	Pro	Gln	Arg	Val	Ala	Glu	Met	Thr	Gly				
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Arg	Lys	Gly	Arg	Val	Val	Ser	Arg	Pro	Asp	Gly	Thr	Val	Ala	Phe	Glu				
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Lys	Gln	Arg	Phe	Met	Ser	Gly	Glu	Lys	Leu	Val	Ala	Ile	Ile	Ser	Glu				
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				805					810					815					
Gln	Arg	Arg	Arg	Val	His	Met	Thr	Leu	Glu	Leu	Pro	Trp	Ser	Ala	Asp				
			820					825					830						
Arg	Ala	Ile	Gln	Gln	Phe	Gly	Arg	Thr	His	Arg	Ser	Asn	Gln	Val	Ser				
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Ala	Pro	Glu	Tyr	Val	Phe	Leu	Ile	Ser	Glu	Leu	Ala	Gly	Glu	Arg	Arg				
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Phe	Ala	Ser	Ile	Val	Ala	Lys	Arg	Leu	Glu	Ser	Leu	Gly	Ala	Leu	Thr				
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Lys Asp Cys Ser Ile Thr Lys Phe Leu Asn Arg Ile Leu Gly Leu Glu						
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Val His Lys Gln Asn Ala Leu Phe Gln Tyr Phe Ser Asp Thr Phe Asp						
	980			985		990
His Leu Ile Glu Met Asp Lys Arg Glu Gly Lys Tyr Asp Met Gly Ile						
	995			1000		1005
Leu Asp Leu Ala Pro Gly Ile Glu Glu Ile Tyr Glu Glu Ser Gln Gln						
	1010			1015		1020
Val Phe Leu Ala Pro Gly His Pro Gln Asp Gly Gln Val Val Phe Tyr						
	1025			1030		1035
Lys Ile Ser Val Asp Arg Gly Leu Lys Trp Glu Asp Ala Phe Ala Lys						
	1045			1050		1055
Ser Leu Ala Leu Thr Gly Pro Tyr Asp Gly Phe Tyr Leu Ser Tyr Lys						
	1060			1065		1070
Val Arg Gly Asn Lys Pro Ser Cys Leu Leu Ala Glu Gln Asn Arg Gly						
	1075			1080		1085
Gln Phe Phe Thr Val Tyr Lys Pro Asn Ile Gly Arg Gln Ser Gln Leu						
	1090			1095		1100
Glu Ala Leu Asp Ser Leu Arg Arg Lys Phe His Arg Val Thr Ala Glu						
	1105			1110		1115
Glu Ala Lys Glu Pro Trp Glu Ser Gly Tyr Ala Leu Ser Leu Thr His						
	1125			1130		1135
Cys Ser His Ser Ala Trp Asn Arg His Cys Arg Leu Ala Gln Glu Gly						
	1140			1145		1150
Lys Asp Cys Leu Gln Gly Leu Arg Leu Arg His His Tyr Met Leu Cys						
	1155			1160		1165
Gly Ala Leu Leu Arg Val Trp Gly Arg Ile Ala Ala Val Met Ala Asp						
	1170			1175		1180
Val Ser Ser Ser Ser Tyr Leu Gln Ile Val Arg Leu Lys Thr Lys Asp						
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Arg Lys Lys Gln Val Gly Ile Lys Ile Pro Glu Gly Cys Val Arg Arg						
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Val Leu Gln Glu Leu Arg Leu Met Asp Ala Asp Val Lys Arg Arg Gln						
	1220			1225		1230
Ala Pro Ala Leu Gly Cys Pro Ala Pro Pro Ala Pro Arg Pro Leu Ala						
	1235			1240		1245
Leu Pro Cys Gly Pro Gly Glu Val Leu Asp Leu Thr Tyr Ser Pro Pro						
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Ala Glu Ala Phe Pro Pro Pro His Phe Ser Phe Pro Ala Pro Leu						
	1265			1270		1275
Ser Leu Asp Ala Gly Pro Gly Val Val Pro Leu Gly Thr Pro Asp Ala						
	1285			1290		1295
Gln Ala Asp Pro Ala Ala Leu Ala His Gln Gly Cys Asp Ile Asn Phe						
	1300			1305		1310
Lys Glu Val Leu Glu Asp Met Leu Arg Ser Leu His Ala Gly Pro Pro						
	1315			1320		1325
Ser Glu Gly Ala Leu Gly Glu Gly Ala Gly Ala Gly Gly Ala Ala Gly						
	1330			1335		1340
Gly Gly Pro Glu Arg Gln Ser Val Ile Gln Phe Ser Pro Pro Phe Pro						
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<210> 3107

<211> 2102

<212> DNA

<213> Homo sapiens

<400> 3107

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<210> 3108

<211> 517

<212> PRT

<213> Homo sapiens

<400> 3108

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Val	Trp	Arg	Pro	Glu	Gly	Glu	Pro	Arg	Phe	Tyr	Pro	Asp	Glu	Glu	Gly
			20					25					30		
Pro	Lys	His	Trp	Thr	Lys	Glu	Arg	His	Gln	Phe	Leu	Met	Glu	Leu	Lys
		35					40					45			
Gln	Glu	Ala	Leu	Thr	Phe	Ala	Arg	Asn	Trp	Gly	Ala	Asp	Tyr	Ile	Leu
	50					55					60				
Phe	Ala	Asp	Thr	Asp	Asn	Ile	Leu	Thr	Asn	Asn	Gln	Thr	Leu	Arg	Leu
65					70					75				80	
Leu	Met	Gly	Gln	Gly	Leu	Pro	Val	Val	Ala	Pro	Met	Leu	Asp	Ser	Gln
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Thr	Tyr	Tyr	Ser	Asn	Phe	Trp	Cys	Gly	Ile	Thr	Pro	Gln	Gly	Tyr	Tyr
			100					105					110		
Arg	Arg	Thr	Ala	Glu	Tyr	Phe	Pro	Thr	Lys	Asn	Arg	Gln	Arg	Arg	Gly
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Cys	Phe	Arg	Val	Pro	Met	Val	His	Ser	Thr	Phe	Leu	Ala	Ser	Leu	Arg
	130					135					140				
Ala	Glu	Gly	Ala	Asp	Gln	Leu	Ala	Phe	Tyr	Pro	Pro	His	Pro	Asn	Tyr
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Thr	Trp	Pro	Phe	Asp	Asp	Ile	Ile	Val	Phe	Ala	Tyr	Ala	Cys	Gln	Ala
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<210> 3109
<211> 959
<212> DNA
<213> Homo sapiens
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 240
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<210> 3110

<211> 207

<212> PRT

<213> Homo sapiens

<400> 3110

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			20					25					30		
Trp	Ser	Pro	Asp	Gly	Arg	His	Ile	Leu	Asn	Thr	Thr	Glu	Phe	His	Leu
		35					40					45			
Arg	Ile	Thr	Val	Trp	Ser	Leu	Cys	Thr	Lys	Ser	Val	Ser	Tyr	Ile	Lys
	50					55					60				
Tyr	Pro	Lys	Ala	Cys	Leu	Gln	Gly	Ile	Thr	Phe	Thr	Arg	Asp	Gly	Arg
65					70				75					80	
Tyr	Met	Ala	Leu	Ala	Glu	Arg	Arg	Asp	Cys	Lys	Asp	Tyr	Val	Ser	Ile
			85					90					95		
Phe	Val	Cys	Ser	Asp	Trp	Gln	Leu	Leu	Arg	His	Phe	Asp	Thr	Asp	Thr
			100				105					110			
Gln	Asp	Leu	Thr	Gly	Ile	Glu	Trp	Ala	Pro	Asn	Gly	Cys	Val	Leu	Ala
	115					120					125				
Val	Trp	Asp	Thr	Cys	Leu	Glu	Tyr	Lys	Ile	Leu	Leu	Tyr	Ser	Leu	Asp
	130				135						140				
Gly	Arg	Leu	Leu	Ser	Thr	Tyr	Ser	Ala	Xaa	Arg	Val	Val	Xaa	Leu	Gly

145		150		155		160									
Ile	Lys	Ser	Val	Ala	Trp	Ser	Pro	Ser	Ser	Gln	Phe	Leu	Ala	Val	Gly
		165				170						175			
Ser	Tyr	Asp	Gly	Lys	Val	Arg	Ile	Leu	Asn	His	Val	Thr	Trp	Lys	Met
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<210> 3111

<211> 1269

<212> DNA

<213> Homo sapiens

<400> 3111

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<210> 3112
 <211> 151
 <212> PRT
 <213> Homo sapiens

<400> 3112
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 35 40 45
 Arg Asp Trp Glu Glu Arg Arg Gly Val Thr Thr Val Gln His Pro Glu
 50 55 60
 Lys Ser Asp Trp Gln Thr Arg Thr Gly Gln Pro Cys Ser Cys Met Ile
 65 70 75 80
 Gln Glu Leu Ala Ser Glu Arg Glu Ser Val Ala Glu Ala Gly Gly Ser
 85 90 95
 Ala Arg Gln Lys Val Arg Gly Leu Val Leu Arg Arg Gly Lys Arg Gln
 100 105 110
 Ser Glu Ser Leu His Ala Pro Gly Leu His Gly Arg Ala Arg Ala Ser
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 Gln Lys Arg Val Asn Asp Pro Glu Cys Asp Trp Glu Gly Glu Leu Ile
 130 135 140
 Pro Tyr Gln Glu Thr Gly Ser
 145 150

<210> 3113
 <211> 631
 <212> DNA
 <213> Homo sapiens

<400> 3113
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 120
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 180
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 420
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<210> 3114

<211> 210

<212> PRT

<213> Homo sapiens

<400> 3114

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			20					25					30		
Ile	Val	Ala	Ile	Met	Ile	Pro	Glu	Pro	Lys	Gly	Lys	Glu	Ile	Val	Ser
		35					40					45			
Leu	Leu	Glu	Arg	Asn	Ile	Thr	Val	Thr	Met	Tyr	Ile	Thr	Ile	Gly	Thr
		50				55					60				
Arg	Asn	Leu	Gln	Lys	Tyr	Val	Ser	Arg	Thr	Ser	Val	Val	Phe	Val	Ser
65					70					75				80	
Ile	Ser	Phe	Ile	Val	Leu	Met	Ile	Ile	Ser	Leu	Ala	Trp	Leu	Val	Phe
			85						90					95	
Tyr	Tyr	Ile	Gln	Arg	Phe	Arg	Tyr	Ala	Asn	Ala	Arg	Asp	Arg	Asn	Gln
			100					105					110		
Arg	Arg	Leu	Gly	Asp	Ala	Ala	Lys	Lys	Ala	Ile	Ser	Lys	Leu	Gln	Ile
		115					120					125			
Arg	Thr	Ile	Lys	Lys	Gly	Asp	Lys	Glu	Thr	Glu	Ser	Asp	Phe	Asp	Asn
	130				135						140				
Cys	Ala	Val	Cys	Ile	Glu	Gly	Tyr	Lys	Pro	Asn	Asp	Val	Val	Arg	Ile
145					150					155				160	
Leu	Pro	Cys	Arg	His	Leu	Phe	His	Lys	Ser	Cys	Val	Asp	Pro	Trp	Leu
			165					170						175	
Leu	Asp	His	Arg	Thr	Cys	Pro	Met	Cys	Lys	Met	Asn	Ile	Leu	Lys	Ala
		180					185					190			
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<210> 3115

<211> 1366

<212> DNA

<213> Homo sapiens

<400> 3115

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<210> 3116

<211> 191

<212> PRT

<213> Homo sapiens

<400> 3116

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Val	Leu	Tyr	Phe	Ala	Gln	Ser	Glu	Asn	Ile	Ala	Ala	His	Glu	Asn	Cys
			20					25					30		
Leu	Leu	Tyr	Ser	Ser	Gly	Leu	Val	Glu	Cys	Glu	Asp	Gln	Asp	Pro	Leu
		35				40					45				
Asn	Pro	Asp	Arg	Ser	Phe	Asp	Val	Glu	Ser	Val	Lys	Lys	Glu	Ile	Gln

50	55	60
Arg Gly Arg Lys Leu Lys Cys Lys Phe Cys His Lys Arg Gly Ala Thr		
65	70	75
Val Gly Cys Asp Leu Lys Asn Cys Asn Lys Asn Tyr His Phe Phe Cys		80
	85	90
Ala Lys Lys Asp Asp Ala Val Pro Gln Ser Asp Gly Val Arg Gly Ile		95
	100	105
Tyr Lys Leu Leu Cys Gln Gln His Ala Gln Phe Pro Ile Ile Ala Gln		110
	115	120
Ser Gly Lys Phe Ser Gly Val Lys Arg Lys Arg Gly Arg Lys Lys Pro		125
	130	135
Leu Ser Gly Asn His Val Gln Pro Pro Glu Thr Met Lys Cys Asn Thr		140
145	150	155
Phe Ile Arg Gln Val Lys Glu Glu His Gly Arg His Thr Asp Ala Thr		160
	165	170
Val Lys Val Pro Phe Leu Lys Lys Cys Lys Xaa Ser Arg Thr Ser		175
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<210> 3117

<211> 1373

<212> DNA

<213> Homo sapiens

<400> 3117

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240
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420
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720
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900

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<210> 3118

<211> 312

<212> PRT

<213> Homo sapiens

<400> 3118

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			20					25					30		
Ala	Asp	Thr	Val	His	Leu	Ala	Val	Glu	Phe	Phe	Asn	Leu	Thr	His	Leu
			35				40						45		
Pro	Ala	Asn	Leu	Leu	Gln	Gly	Ala	Ser	Lys	Leu	Gln	Glu	Leu	His	Leu
			50			55					60				
Ser	Ser	Asn	Gly	Leu	Glu	Ser	Leu	Ser	Pro	Glu	Phe	Leu	Arg	Pro	Val
65					70					75				80	
Pro	Gln	Leu	Arg	Val	Leu	Asp	Leu	Thr	Arg	Asn	Ala	Leu	Thr	Gly	Leu
				85					90					95	
Pro	Pro	Gly	Leu	Phe	Gln	Ala	Ser	Ala	Thr	Leu	Asp	Thr	Leu	Val	Leu
			100					105					110		
Lys	Glu	Asn	Gln	Leu	Glu	Val	Leu	Glu	Val	Ser	Trp	Leu	His	Gly	Leu
			115				120					125			
Lys	Ala	Leu	Gly	His	Leu	Asp	Leu	Ser	Gly	Asn	Arg	Leu	Arg	Lys	Leu
			130			135					140				
Pro	Pro	Gly	Leu	Leu	Ala	Asn	Phe	Thr	Leu	Leu	Arg	Thr	Leu	Asp	Leu
145					150					155				160	
Gly	Glu	Asn	Gln	Leu	Glu	Thr	Leu	Pro	Pro	Asp	Leu	Leu	Arg	Gly	Pro
				165					170					175	
Leu	Gln	Leu	Glu	Arg	Leu	His	Leu	Glu	Gly	Asn	Lys	Leu	Gln	Val	Leu
				180				185					190		
Gly	Lys	Asp	Leu	Leu	Leu	Pro	Gln	Pro	Asp	Leu	Arg	Tyr	Leu	Phe	Leu
			195			200						205			
Ser	Gly	Asn	Lys	Leu	Ala	Arg	Val	Ala	Ala	Gly	Ala	Phe	Gln	Gly	Leu
			210			215					220				
Arg	Gln	Leu	Asp	Met	Leu	Asp	Leu	Ser	Asn	Asn	Ser	Leu	Ala	Ser	Val
225					230					235				240	
Pro	Glu	Gly	Leu	Trp	Ala	Ser	Leu	Gly	Gln	Pro	Asn	Trp	Asp	Met	Arg

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                245                250                255
Asp Gly Phe Asp Ile Ser Gly Asn Pro Trp Ile Cys Asp Gln Asn Leu
                260                265                270
Ser Asp Leu Tyr Arg Trp Leu Gln Ala Gln Lys Asp Lys Met Phe Ser
                275                280                285
Gln Asn Asp Thr Arg Cys Ala Gly Pro Glu Ala Val Lys Gly Gln Thr
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Leu Leu Ala Val Ala Lys Ser Gln
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<210> 3119

<211> 427

<212> DNA

<213> Homo sapiens

<400> 3119

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180
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240
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300
tcttcagcac tgctcccagc tgccaggggtg cctgctgccc ccacccctgt tgcctactat
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<210> 3120

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3120

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Ile Gln Met Thr Ser Ala Glu Arg Ala Leu Ala Ala Ala Gln Arg Cys
20          25          30
His Lys Lys Val Met Lys Glu Arg Tyr Val Glu Val Val Pro Cys Ser
35          40          45
Thr Glu Glu Met Ser Arg Val Leu Met Gly Gly Thr Leu Gly Arg Ser
50          55          60
Gly Met Ser Pro Pro Pro Cys Lys Leu Pro Cys Leu Ser Pro Pro Thr
65          70          75          80
Tyr Thr Thr Phe Gln Ala Thr Pro Thr Leu Ile Pro Thr Glu Thr Ala
85          90          95
Ala Leu Tyr Pro Ser Ser Ala Leu Leu Pro Ala Ala Arg Val Pro Ala
100         105         110
Ala Pro Thr Pro Val Ala Tyr Tyr Pro Gly Pro Ala Thr Gln Leu Tyr

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	115		120		125								
Leu	Asn	Tyr	Thr	Ala	Tyr	Tyr	Pro	Ser	Pro	Glu	Asp	Asn	Ala
	130					135						140	

<210> 3121
 <211> 284
 <212> DNA
 <213> Homo sapiens

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 120
 taagaggaac atgaacctgg acggggcagc ttccattgtc cctctcctgc tcctgctaatt
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 284

<210> 3122
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 3122
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 Gly Pro Ser Glu Asp Phe Ser Thr Ser Ala Ala Thr Ser Ala Ala Ser
 20 25 30
 Ser His Val Arg Arg Asn Lys Arg Asn Met Asn Leu Asp Gly Ala Ala
 35 40 45
 Ser Ile Val Pro Leu Leu Leu Leu Leu Met Asn Lys Ala Ser Pro Glu
 50 55 60
 Tyr Glu Glu Asn Met His Arg Tyr Gln Lys Ala Ala Lys Leu Phe Arg
 65 70 75 80
 Gly Arg Phe Ser Leu Phe Trp Trp Thr Val Val
 85 90

<210> 3123
 <211> 344
 <212> DNA
 <213> Homo sapiens

<400> 3123
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 gcagcccagg tgaccttcag aaagacattg gagaaggaag caaagggaga ggagcccagc
 180
 atcgcagtcc ccaagttcaa acagaggaag ggggagtccg acggggccta tatccaccgc
 240

atgcagcaag aggccagca tgtgctgttc ctcagcaaga accaggccat ccggcagcca
 300
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 344

<210> 3124
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 3124
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 20 25 30
 Lys Gly Glu Glu Pro Asp Ile Ala Val Pro Lys Phe Lys Gln Arg Lys
 35 40 45
 Gly Glu Ser Asp Gly Ala Tyr Ile His Arg Met Gln Gln Glu Ala Gln
 50 55 60
 His Val Leu Phe Leu Ser Lys Asn Gln Ala Ile Arg Gln Pro Glu Val
 65 70 75 80
 Gln Ala Ala Pro Lys Glu Lys Ser Glu Gln Lys Lys
 85 90

<210> 3125
 <211> 647
 <212> DNA
 <213> Homo sapiens

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 180
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 aaaactgcag cccatcctgg aattagggaa catcacaaaa cgtactgggg agaactcccc
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 360
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 420
 aacccatctt cctgtgttct ctgccaagag agctggagca aaagagatga gtttgagact
 480
 ctgattcatc catcaagaca aataaactca gtctatggag gtttagcaggg caatttgtga
 540
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<210> 3126

<211> 116
 <212> PRT
 <213> Homo sapiens

<400> 3126
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 Phe Gln Asn Ser Thr Phe Val Cys Phe Thr Asn Cys Pro Ala Asn Leu
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 His Arg Leu Ser Leu Phe Val Leu Met Asp Glu Ser Glu Ser Gln Thr
 35 40 45
 His Leu Phe Cys Ser Ser Ser Leu Gly Arg Glu His Arg Lys Met Gly
 50 55 60
 Phe Ala Tyr Val Cys Val Trp Gly Gly Leu Phe Phe Leu Cys Phe Ser
 65 70 75 80
 Val Leu Ala Ile Ala Cys Gly Arg Ala Gly Thr Trp Asp Leu Ala Arg
 85 90 95
 Leu Leu Ala Trp Ala Glu Ala Thr Trp Gly Val Leu Pro Ser Thr Phe
 100 105 110
 Cys Asp Val Pro
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<210> 3127
 <211> 2218
 <212> DNA
 <213> Homo sapiens

<400> 3127
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 180
 ggcctgggct tctccaacac catgtactca agactagggg agatcatcag catggatggg
 240
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 360
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 420
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 720
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<210> 3128

<211> 565

<212> PRT

<213> Homo sapiens

<400> 3128

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          20           25           30
Gln Glu Gly Lys Ile Pro Asp Glu Thr Leu Glu Lys Leu Lys Ser Leu
          35           40           45
Gly Leu Phe Gly Leu Gln Val Pro Glu Glu Tyr Gly Gly Leu Gly Phe
 50           55           60
Ser Asn Thr Met Tyr Ser Arg Leu Gly Glu Ile Ile Ser Met Asp Gly
65           70           75           80
Ser Ile Thr Val Thr Leu Ala Ala His Gln Ala Ile Gly Leu Lys Gly
          85           90           95
Ile Ile Leu Ala Gly Thr Glu Glu Gln Lys Ala Lys Tyr Leu Pro Lys
          100          105          110
Leu Ala Ser Gly Glu His Ile Ala Ala Phe Cys Leu Thr Glu Pro Ala
          115          120          125
Ser Gly Ser Asp Ala Ala Ser Ile Arg Ser Arg Ala Thr Leu Ser Glu
          130          135          140
Asp Lys Lys His Tyr Ile Leu Asn Gly Ser Lys Val Trp Ile Thr Asn
145          150          155          160
Gly Gly Leu Ala Asn Ile Phe Thr Val Phe Ala Lys Thr Glu Val Val
          165          170          175
Asp Ser Asp Gly Ser Val Lys Asp Lys Ile Thr Ala Phe Ile Val Glu
          180          185          190
Arg Asp Phe Gly Gly Val Thr Asn Gly Lys Pro Glu Asp Lys Leu Gly
          195          200          205
Ile Arg Gly Ser Asn Thr Cys Glu Val His Phe Glu Asn Thr Lys Ile
          210          215          220
Pro Val Glu Asn Ile Leu Gly Glu Val Gly Asp Gly Phe Lys Val Ala
225          230          235          240
Met Asn Ile Leu Asn Ser Gly Arg Phe Ser Met Gly Ser Val Val Ala
          245          250          255
Gly Leu Leu Lys Arg Leu Ile Glu Met Thr Ala Glu Tyr Ala Cys Thr
          260          265          270
Arg Lys Gln Phe Asn Lys Arg Leu Ser Glu Phe Gly Leu Ile Gln Glu
          275          280          285
Lys Phe Ala Leu Met Ala Gln Lys Ala Tyr Val Met Glu Ser Met Thr
          290          295          300
Tyr Leu Thr Ala Gly Met Leu Asp Gln Pro Gly Phe Pro Asp Cys Ser
305          310          315          320
Ile Glu Ala Ala Met Val Lys Val Phe Ser Ser Glu Ala Ala Trp Gln
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Cys Val Ser Glu Ala Leu Gln Ile Leu Gly Gly Leu Gly Tyr Thr Arg
          340          345          350
Asp Tyr Pro Tyr Glu Arg Ile Leu Arg Asp Thr Arg Ile Leu Leu Ile
          355          360          365
Phe Glu Gly Thr Asn Glu Ile Leu Arg Met Tyr Ile Ala Leu Thr Gly
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Leu Gln His Ala Gly Arg Ile Leu Thr Thr Arg Ile His Glu Leu Lys
385          390          395          400
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          405          410          415
Asp Ser Leu Gly Arg Thr Val Asp Leu Gly Leu Thr Gly Asn His Gly

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			420					425					430				
Val	Val	His	Pro	Ser	Leu	Ala	Asp	Ser	Ala	Asn	Lys	Phe	Glu	Glu	Asn		
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	450					455					460						
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Asn	Thr	Phe	Cys	Val	Glu	Ala	Tyr	Leu	Gln	Asn	Leu	Phe	Ser	Leu	Ser		
		515				520						525					
Gln	Leu	Asp	Lys	Tyr	Ala	Pro	Glu	Asn	Leu	Asp	Glu	Gln	Ile	Lys	Lys		
	530				535						540						
Val	Ser	Gln	Gln	Ile	Leu	Glu	Lys	Arg	Ala	Tyr	Ile	Cys	Ala	His	Pro		
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Leu	Asp	Arg	Thr	Cys													
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<210> 3129

<211> 1964

<212> DNA

<213> Homo sapiens

<400> 3129

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840

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<210> 3130

<211> 273

<212> PRT

<213> Homo sapiens

<400> 3130

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Ala	Met	Glu	Phe	Ile	Ala	Ala	Thr	Glu	Val	Ala	Val	Ile	Gly	Phe	Phe
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Gln	Asp	Leu	Glu	Ile	Pro	Ala	Val	Pro	Ile	Leu	His	Ser	Met	Val	Gln

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Lys	Phe	Pro	Gly	Val	Ser	Phe	Gly	Ile	Ser	Thr	Asp	Ser	Glu	Val	Leu
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Asp	Asn	Glu	Gln	Leu	Asn	Leu	Glu	Asp	Glu	Asp	Ile	Glu	Ser	Ile	Asp
		115					120					125			
Ala	Thr	Lys	Leu	Ser	Arg	Phe	Ile	Glu	Ile	Asn	Ser	Leu	His	Met	Val
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Gln	Ile	His	Leu	Leu	Ile	Met	Asn	Lys	Ala	Ser	Pro	Glu	Tyr	Glu	
			165					170					175		
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			180					185					190		
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 <211> 1544
 <212> DNA
 <213> Homo sapiens

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<211> 283

<212> PRT

<213> Homo sapiens

<400> 3132

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Gly	Ser	Thr	Gly	Thr	Ala	Glu	Gly	Gly	Asn	Met	Ser	Arg	Leu	Ser	Leu
			20					25					30		
Thr	Arg	Ser	Pro	Val	Ser	Pro	Leu	Ala	Ala	Gln	Gly	Ile	Pro	Leu	Pro
		35					40					45			
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	50					55				60					
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65					70				75					80	
Arg	Ile	Gly	Arg	Leu	Phe	Asp	Gly	Thr	Glu	Pro	Ile	Val	Leu	Asp	Ser
			85					90						95	
Leu	Lys	Gln	His	Tyr	Phe	Ile	Asp	Arg	Asp	Gly	Gln	Met	Phe	Arg	Tyr
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<213> Homo sapiens

<400> 3134

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			20					25					30		
Thr	Glu	Val	Lys	Ser	Glu	Glu	Gly	Pro	Gly	Trp	Thr	Ile	Leu	Arg	Asp
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<210> 3135

<211> 3166

<212> DNA

<213> Homo sapiens

<400> 3135

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<211> 278

<212> PRT

<213> Homo sapiens

<400> 3136

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			20					25					30		
Lys	Cys	Pro	Ile	Cys	Gln	Thr	Val	Lys	Ala	Asn	Gln	Leu	Glu	Leu	Glu
		35					40					45			
Thr	His	Thr	Arg	Glu	His	Arg	Leu	Gly	Asn	His	Tyr	Lys	Cys	Asp	Gln
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Cys	Gly	Tyr	Leu	Ser	Lys	Thr	Ala	Asn	Lys	Leu	Ile	Glu	His	Val	Arg
65					70				75					80	
Val	His	Thr	Gly	Ser	Gly	Pro	Phe	His	Trp	Asp	Gln	Cys	Ser	Tyr	Ser
				85				90					95		
Cys	Lys	Arg	Lys	Asp	Asn	Leu	Asn	Leu	His	Lys	Lys	Leu	Lys	His	Ala
			100				105					110			
Pro	Arg	Gln	Thr	Phe	Ser	Cys	Glu	Glu	Cys	Leu	Phe	Lys	Thr	Thr	His
	115						120				125				
Pro	Phe	Val	Phe	Ser	Arg	His	Val	Lys	Lys	His	Gln	Ser	Gly	Asp	Cys
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Pro	Glu	Glu	Asp	Lys	Lys	Gly	Leu	Cys	Pro	Ala	Pro	Lys	Glu	Pro	Ala
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				165					170					175	
Ser	Pro	Leu	Ser	Val	Met	Ser	Ala	Ser	Gln	Ala	Leu	Gln	Thr	Val	Ala
			180				185					190			
Leu	Ser	Ala	Ala	His	Gly	Ser	Ser	Ser	Glu	Pro	Asn	Leu	Ala	Leu	Lys
	195						200				205				
Ala	Leu	Ala	Phe	Asn	Gly	Ser	Pro	Leu	Arg	Phe	Asp	Lys	Tyr	Arg	Asn
	210				215					220					
Ser	Asp	Phe	Ala	His	Leu	Ile	Pro	Leu	Thr	Met	Leu	Tyr	Pro	Lys	Asn
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<210> 3138

<211> 977

<212> PRT

<213> Homo sapiens

<400> 3138

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2356

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Pro	Tyr	Tyr	Pro	Cys 515	Met	Ala	Lys	Val	Ser 520	Leu	Gln	Leu	Ala	Ile	Gln 525
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Thr 545	Glu	Glu	Trp	Ile	Ala 550	Thr	Ile	Glu	Ala	Leu 555	Leu	Ser	Lys	Ser	Phe 560
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Glu	Leu	Ile	Lys	Ile 580	Phe	Leu	Leu	Glu	Cys 585	Asn	Val	Arg	Glu	Val	Arg 590
Val	Ala	Val	Ala	Thr 595	Ile	Leu	Glu	Lys	Thr 600	Leu	Asp	Ser	Ala	Leu	Phe 605
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Ala 625	Leu	Leu	Asp	Lys 630	Asp	Val	Pro	Glu	Asn	Cys 635	Lys	Asn	Cys	Ala	Gln 640
Tyr	Phe	Phe	Leu	Phe 645	Asn	Thr	Phe	Val	Gln 650	Lys	Gln	Gly	Ile	Arg	Ala 655
Gly	Asp	Leu	Leu	Leu 660	Arg	His	Ser	Ala	Leu 665	Arg	His	Met	Ile	Ser	Phe 670
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Leu	Leu	Ala	Leu	Ile 770	Glu	Met	Val	Val	Tyr 775	Cys	Cys	Phe	Cys	Asn	Glu 780
His 785	Phe	Ser	Phe	Thr 790	Met	Leu	His	Phe	Ile 795	Lys	Asn	Gln	Leu	Glu	Thr 800
Ala	Pro	Pro	His	Glu 805	Leu	Lys	Asn	Thr	Phe 810	Gln	Leu	Leu	His	Glu	Ile 815
Leu	Val	Ile	Glu	Asp 820	Pro	Ile	Gln	Ala	Glu 825	Arg	Val	Lys	Phe	Val	Phe 830
Glu	Thr	Glu	Asn	Gly 835	Leu	Leu	Ala	Leu	Met 840	His	His	Ser	Asn	His	Val 845
Asp	Ser	Ser	Arg	Cys 850	Tyr	Gln	Cys	Val	Lys 855	Phe	Leu	Val	Thr	Leu	Ala 860
Gln 865	Lys	Cys	Pro	Ala 870	Ala	Lys	Glu	Tyr	Phe 875	Lys	Glu	Asn	Ser	His	His 880
Trp	Ser	Trp	Ala	Val	Gln	Trp	Leu	Gln	Lys	Lys	Met	Ser	Glu	His	Tyr

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Phe	Gln	Arg	Thr	Ile	Ser	Ala	Gln	Asp	Ala	Leu	Ala	Tyr	Ala	Thr	Ala				
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	930					935					940								
Ser	Pro	Ala	Asn	Glu	Asn	Gly	Asp	Arg	His	Leu	Gln	Gln	Gly	Ser	Glu				
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<210> 3139

<211> 503

<212> DNA

<213> Homo sapiens

<400> 3139

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<211> 115

<212> PRT

<213> Homo sapiens

<400> 3140

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Tyr	Ser	Ala	Leu	Pro	Arg	Gly	Leu	Gly	Cys	Ser	Leu	Leu	Phe	Ile	Pro				
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Leu	Gly	Leu	Val	Asp	Arg	Arg	Thr	His	Ala	Pro	Thr	Val	Leu	Ala	Leu				

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Gly	Phe	Met	Ala	Leu	Tyr	Ser	Leu	Leu	Pro	His	Lys	Glu	Leu	Arg	Phe
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<210> 3141

<211> 1815

<212> DNA

<213> Homo sapiens

<400> 3141

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 <211> 451
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Asp Val Phe Phe Tyr Gln Ala Asp Asp Glu His Tyr Ile Pro Arg Ala
 50 55 60
 Val Leu Leu Asp Leu Glu Pro Arg Val Ile His Ser Ile Leu Asn Ser
 65 70 75 80
 Pro Tyr Ala Lys Leu Tyr Asn Pro Glu Asn Ile Tyr Leu Ser Glu His
 85 90 95
 Gly Gly Gly Ala Gly Asn Asn Trp Ala Ser Gly Phe Ser Gln Gly Glu
 100 105 110
 Lys Ile His Glu Asp Ile Phe Asp Ile Ile Asp Arg Glu Ala Asp Gly
 115 120 125
 Ser Asp Ser Leu Glu Gly Phe Val Leu Cys His Ser Ile Ala Gly Gly
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 Thr Gly Ser Gly Leu Gly Ser Tyr Leu Leu Glu Arg Leu Asn Asp Arg
 145 150 155 160
 Tyr Pro Lys Lys Leu Val Gln Thr Tyr Ser Val Phe Pro Asn Gln Asp
 165 170 175
 Glu Met Ser Asp Val Val Val Gln Pro Tyr Asn Ser Leu Leu Thr Leu
 180 185 190
 Lys Arg Leu Thr Gln Asn Ala Asp Cys Val Val Val Leu Asp Asn Thr

195	200	205
Ala Leu Asn Arg Ile	Ala Thr Asp Arg Leu His	Ile Gln Asn Pro Ser
210	215	220
Phe Ser Gln Ile Asn	Gln Leu Val Ser Thr	Ile Met Ser Ala Ser Thr
225	230	235
Thr Thr Leu Arg Tyr	Pro Gly Tyr Met Asn	Asn Asp Leu Ile Gly Leu
245	250	255
Ile Ala Ser Leu Ile	Pro Thr Pro Arg	Leu His Phe Leu Met Thr Gly
260	265	270
Tyr Thr Pro Leu Thr	Thr Asp Gln Ser	Val Ala Ser Val Arg Lys Thr
275	280	285
Thr Val Leu Asp Val	Met Arg Arg Leu	Leu Gln Pro Lys Asn Val Met
290	295	300
Val Ser Thr Gly Arg	Asp Arg Gln Thr	Asn His Cys Tyr Ile Ala Ile
305	310	315
Leu Asn Ile Ile Gln	Gly Glu Val Asp	Pro Thr Gln Val His Lys Ser
325	330	335
Leu Gln Arg Ile Arg	Glu Arg Lys Leu	Ala Asn Phe Ile Pro Trp Gly
340	345	350
Pro Ala Ser Ile Gln	Val Ala Leu Ser	Arg Lys Ser Pro Tyr Leu Pro
355	360	365
Ser Ala His Arg Val	Ser Gly Leu Met	Met Ala Asn His Thr Ser Ile
370	375	380
Ser Ser Leu Phe Glu	Arg Thr Cys Arg	Gln Tyr Asp Lys Leu Arg Lys
385	390	395
Arg Glu Ala Phe Leu	Glu Gln Phe Arg	Lys Glu Asp Met Phe Lys Asp
405	410	415
Asn Phe Asp Glu Met	Asp Thr Ser Arg	Glu Ile Val Gln Gln Leu Ile
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Asp Glu Tyr His Ala	Ala Thr Arg Pro	Asp Tyr Ile Ser Trp Gly Thr
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Gln Glu Gln		
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<210> 3143

<211> 356

<212> DNA

<213> Homo sapiens

<400> 3143

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<210> 3144

<211> 81
 <212> PRT
 <213> Homo sapiens

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 35 40 45
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 50 55 60
 Pro His His Ser Gln Thr Pro Pro Gln Arg Val Cys Leu Arg Ala Pro
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<210> 3145
 <211> 436
 <212> DNA
 <213> Homo sapiens

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 <211> 131
 <212> PRT
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 35 40 45
 Arg Leu Pro Pro Phe Thr His Leu Pro Ser Val Pro Gly Pro Pro Ser

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Leu Val Cys Gln Thr	Leu Gln Pro Pro Ala Ser	Gly His Ser Ala Arg		
65	70	75	80	
Gln Met Thr Ser Gly	Gly Glu Pro His Ile Ser	Thr Gly Ser Arg Arg		
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Pro Arg Lys Leu Pro	Trp Pro Ala His Pro Arg	Cys Ser Ala Cys Pro		
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<210> 3147

<211> 3106

<212> DNA

<213> Homo sapiens

<400> 3147

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<210> 3148

<211> 444

<212> PRT

<213> Homo sapiens

<400> 3148

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		20					25						30		
Thr	Asp	Arg	Trp	Leu	Val	Ile	Asp	Arg	Lys	Val	Tyr	Asn	Ile	Thr	Lys
	35					40						45			
Trp	Ser	Ile	Gln	His	Pro	Gly	Gly	Gln	Arg	Val	Ile	Gly	His	Tyr	Ala
	50					55				60					
Gly	Glu	Asp	Ala	Thr	Asp	Ala	Phe	Arg	Ala	Phe	His	Pro	Asp	Leu	Glu
65					70				75					80	
Phe	Val	Gly	Lys	Phe	Leu	Lys	Pro	Leu	Leu	Ile	Gly	Glu	Leu	Ala	Pro
			85					90						95	
Glu	Glu	Pro	Ser	Gln	Asp	His	Gly	Lys	Asn	Ser	Lys	Ile	Thr	Glu	Asp
		100					105						110		
Phe	Arg	Ala	Leu	Arg	Lys	Thr	Ala	Glu	Asp	Met	Asn	Leu	Phe	Lys	Thr
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	130				135					140					
Ser	Ile	Ala	Trp	Phe	Thr	Val	Phe	Tyr	Phe	Gly	Asn	Gly	Trp	Ile	Pro
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Thr	Leu	Ile	Thr	Ala	Phe	Val	Leu	Ala	Thr	Ser	Gln	Ala	Gln	Ala	Gly
		165						170						175	
Trp	Leu	Gln	His	Asp	Tyr	Gly	His	Leu	Ser	Val	Tyr	Arg	Lys	Pro	Lys
		180					185					190			
Trp	Asn	His	Leu	Val	His	Lys	Phe	Val	Ile	Gly	His	Leu	Lys	Gly	Ala
	195					200					205				
Ser	Ala	Asn	Trp	Trp	Asn	His	Arg	His	Phe	Gln	His	His	Ala	Lys	Pro
	210				215					220					
Asn	Ile	Phe	His	Lys	Asp	Pro	Asp	Val	Asn	Met	Leu	His	Val	Phe	Val
225				230					235					240	
Leu	Gly	Glu	Trp	Gln	Pro	Ile	Glu	Tyr	Gly	Lys	Lys	Lys	Leu	Lys	Tyr
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180
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240
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300
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720

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<210> 3150

<211> 201

<212> PRT

<213> Homo sapiens

<400> 3150

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			20					25					30		
Ala	Pro	Ala	Ala	Gly	Thr	Met	Gly	Ala	Ala	His	Ser	Ala	Ser	Glu	Glu
		35					40					45			
Val	Arg	Glu	Leu	Glu	Gly	Lys	Thr	Gly	Phe	Ser	Ser	Asp	Gln	Ile	Glu
	50					55					60				
Gln	Leu	His	Arg	Arg	Phe	Lys	Gln	Leu	Ser	Gly	Asp	Gln	Pro	Thr	Ile
65					70					75				80	
Arg	Lys	Glu	Asn	Phe	Asn	Asn	Val	Pro	Asp	Leu	Glu	Leu	Asn	Pro	Ile
			85						90				95		
Arg	Ser	Lys	Ile	Val	Arg	Ala	Phe	Phe	Asp	Asn	Arg	Asn	Leu	Arg	Lys
			100					105					110		
Gly	Pro	Ser	Gly	Leu	Ala	Asp	Glu	Ile	Asn	Phe	Glu	Asp	Phe	Leu	Thr
		115					120					125			
Ile	Met	Ser	Tyr	Phe	Arg	Pro	Ile	Asp	Thr	Thr	Met	Asp	Glu	Glu	Gln
	130					135					140				
Val	Glu	Leu	Ser	Arg	Lys	Glu	Lys	Leu	Arg	Phe	Leu	Phe	His	Met	Tyr
145					150					155				160	
Asp	Ser	Asp	Ser	Asp	Gly	Arg	Ile	Thr	Leu	Glu	Glu	Tyr	Arg	Asn	Val
			165					170					175		
Lys	Trp	Ser	Arg	Ser	Cys	Cys	Arg	Glu	Thr	Leu	Thr	Ser	Arg	Arg	Ser
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<210> 3151

<211> 2079

<212> DNA

<213> Homo sapiens

<400> 3151

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240
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360
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720
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 2079

<210> 3152
 <211> 214
 <212> PRT
 <213> Homo sapiens

<400> 3152
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 35 40 45
 Ile Phe Ser Phe Ile Ser Lys Asp Val Val Ser Lys Leu Arg Ile Met
 50 55 60
 Glu Arg Leu Arg Gly Gly Pro Gln Ser Glu His Tyr Arg Ser Leu Gln
 65 70 75 80
 Ala Met Val Ala His Glu Leu Ser Asn Arg Leu Val Asp Leu Glu Gly
 85 90 95
 Arg Ser His His Pro Glu Ser Gly Cys Arg Thr Val Leu Arg Leu His
 100 105 110
 Arg Ala Leu His Trp Leu Gln Leu Phe Leu Glu Gly Leu Arg Thr Ser
 115 120 125
 Pro Glu Asp Ala Arg Thr Ser Ala Leu Cys Ala Asp Ser Tyr Asn Ala
 130 135 140
 Ser Leu Ala Ala Tyr His Pro Trp Val Val Arg Arg Ala Val Thr Val
 145 150 155 160
 Ala Phe Cys Thr Leu Pro Thr Arg Glu Val Phe Leu Glu Ala Met Asn
 165 170 175
 Val Gly Pro Pro Glu Gln Ala Val Gln Met Leu Gly Glu Ala Leu Pro
 180 185 190
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 Ser Leu Leu Asp Leu Pro
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<210> 3153
 <211> 1498
 <212> DNA
 <213> Homo sapiens

<400> 3153

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720
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<210> 3154

<211> 65

<212> PRT

<213> Homo sapiens

<400> 3154

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          20           25           30
Ser Gly His Arg Trp Gly Ile Thr Leu Pro Thr Arg Asp Ser Arg His
          35           40           45
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Gly
65

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<210> 3155

<211> 551

<212> DNA

<213> Homo sapiens

<400> 3155

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gacttggatt ttttttcagt caagaatccc ttcaaaaaaa tgttctactca ggaagagtac
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420
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<210> 3156

<211> 178

<212> PRT

<213> Homo sapiens

<400> 3156

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          20           25           30
Thr Ala Ser Thr Asn Cys Asp Ser Ser Ser Glu Gly Leu Glu Lys Asp
          35           40           45
Thr Ala Thr Gln Arg Ser Asp Gln Thr Cys Leu Glu Pro Ser Cys Ser

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50		55		60
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Ile Leu Glu Ile Leu Lys Lys Gly Lys Ala Phe Val Leu Asp Ile Asp				80
	85		90	95
Leu Asp Phe Phe Ser Val Lys Asn Pro Phe Lys Lys Met Phe Thr Gln				
	100		105	110
Glu Glu Tyr Lys Ile Leu Gln Glu Leu Tyr Gln Phe Lys Lys Pro Gly				
	115		120	125
Thr Asn Leu Thr Glu Glu Asp Leu Val Asp Ile Val Asp Thr Arg Ile				
	130		135	140
His Gln Leu Glu Asp Leu Glu Ala Thr Phe Ala Asp Leu Cys Asp Gly				
145		150		155
Asp Asp Glu Glu Thr Val Gln Gly Trp Ala Ser Asn Pro Gly Met Glu				160
	165		170	175
Ser Leu				

<210> 3157

<211> 903

<212> DNA

<213> Homo sapiens

<400> 3157

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720
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900

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903

<210> 3158
<211> 92
<212> PRT
<213> Homo sapiens

<400> 3158
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20 25 30
Thr Glu Pro Pro Thr Pro Glu Pro Gly Pro Lys Thr Pro Pro Arg Thr
35 40 45
Met Gln Glu Ser Pro Leu Gly Leu Gln Val Lys Glu Glu Ser Glu Val
50 55 60
Thr Glu Asp Ser Asp Phe Leu Glu Ser Gly Pro Leu Ala Ala Thr Gln
65 70 75 80
Glu Ser Val Pro Thr Leu Leu Pro Glu Glu Ala Gln
85 90

<210> 3159
<211> 2408
<212> DNA
<213> Homo sapiens

<400> 3159
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240
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<212> PRT
<213> Homo sapiens

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35 40 45
Ala Lys Gln Arg Gly Lys Arg Ala Ile Thr Asp Asn Asp Met Gln Ser
50 55 60
Ile Leu Asp Leu His Asn Lys Leu Arg Ser Gln Val Tyr Pro Thr Ala
65 70 75 80
Ser Asn Met Glu Tyr Met Thr Trp Asp Val Glu Leu Glu Arg Ser Ala
85 90 95
Glu Ser Trp Ala Glu Ser Cys Leu Trp Glu His Gly Pro Ala Ser Leu
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Leu Pro Ser Ile Gly Gln Asn Leu Gly Ala His Trp Gly Arg Tyr Arg
115 120 125
Pro Pro Thr Phe His Val Gln Ser Trp Tyr Asp Glu Val Lys Asp Phe
130 135 140
Ser Tyr Pro Tyr Glu His Glu Cys Asn Pro Tyr Cys Pro Phe Arg Cys
145 150 155 160
Ser Gly Pro Val Cys Thr His Tyr Thr Gln Val Val Trp Ala Thr Ser
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Asn Arg Ile Gly Cys Ala Ile Asn Leu Cys His Asn Met Asn Ile Trp
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Gly Gln Ile Trp Pro Lys Ala Val Tyr Leu Val Cys Asn Tyr Ser Pro
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Lys Gly Asn Trp Trp Gly His Ala Pro Tyr Lys His Gly Arg Pro Cys
210 215 220
Ser Ala Cys Pro Pro Ser Phe Gly Gly Gly Cys Arg Glu Asn Leu Cys
225 230 235 240
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Thr Arg Ser Asp Asp Ser Ser Arg Asn Glu Val Ile Ser Ala Gln Gln
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Met Ser Gln Ile Val Ser Cys Glu Val Arg Leu Arg Asp Gln Cys Lys
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2376


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2377

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<400> 3164

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Ser Ser Val Pro Pro Arg Gln Ala Cys Ala Ser Pro Ala Ser Cys Ser
          35           40           45
Ser Ser Ala Ala Xaa Ala Ser Ala Ser Thr Gly Pro Trp His Ser Gly
          50           55           60
Cys Gly Ser Ser Cys Gly Ser Cys Cys Cys Trp Gly Ser Pro Ser Ala
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Ser Val Gly Val Gly Ala Gly Ala Ile Arg Ser Arg Thr Val
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<212> DNA

<213> Homo sapiens

<400> 3165

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1020

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<400> 3166

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      35           40           45
Ala Glu Trp Asp Gln Val Thr Val Tyr Leu Phe Cys Asp Asp His Lys
 50           55           60
Leu Gln Arg Tyr Ala Leu Asn Arg Ile Thr Val Trp Arg Ser Arg Ser
65           70           75           80
Gly Asn Glu Leu Pro Leu Ala Val Ala Ser Thr Ala Asp Leu Ile Arg
      85           90           95
Cys Lys Leu Leu Asp Val Thr Gly Gly Leu Gly Thr Asp Glu Leu Arg
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Leu Leu Tyr Gly Met Ala Leu Val Arg Phe Val Asn Leu Ile Ser Glu
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Arg Lys Thr Lys Phe Ala Lys Val Pro Leu Lys Cys Leu Ala Gln Glu
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Val Asn Ile Pro Asp Trp Ile Val Asp Leu Arg His Glu Leu Thr His
145           150           155           160
Lys Lys Met Pro His Ile Asn Asp Cys Arg Arg Gly Cys Tyr Phe Val
      165           170           175
Leu Asp Trp Leu Gln Lys Thr Tyr Trp Cys Arg Gln Leu Glu Asn Ser
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Leu Arg Glu Thr Trp Glu Leu Glu Phe Arg Glu Gly Ile Glu Glu
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Glu Asp Gln Glu Glu Asp Lys Asn Ile Val Val Asp Asp Ile Thr Glu
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Gln Lys Pro Glu Pro Gln Asp Asp Gly Lys Ser Thr Glu Ser Asp Val
225           230           235           240
Lys Ala Asp Gly Asp Ser Lys Gly Ser Glu Glu Val Asp Ser His Cys
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Lys Lys Ala Leu Ser His Lys Glu Leu Tyr Glu Arg Ala Arg Glu Leu
      260           265           270
Leu Val Ser Tyr Glu Glu Glu Gln Phe Thr Val Leu Glu Lys Phe Arg
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Tyr Leu Pro Lys Ala Ile Lys Ala Trp Asn Asn Pro Ser Pro Arg Val
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Glu Cys Val Leu Ala Glu Leu Lys Gly Val Thr Cys Glu Asn Arg Glu
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Ala Val Leu Asp Ala Phe Leu Asp Asp Gly Phe Leu Val Pro Thr Phe
      325           330           335
Glu Gln Leu Ala Ala Leu Gln Ile Glu Tyr Glu Glu Asn Val Asp Leu
      340           345           350
Asn Asp Val Leu Val Pro Lys Pro Phe Ser Gln Phe Trp Gln Pro Leu
      355           360           365
Leu Arg Gly Leu His Ser Gln Asn Phe Thr Gln Ala Leu Leu Glu Arg
      370           375           380
Met Leu Ser Glu Leu Pro Ala Leu Gly Ile Ser Gly Ile Arg Pro Thr
385           390           395           400
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<212> DNA
<213> Homo sapiens
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<211> 312

<212> PRT

<213> Homo sapiens

<400> 3168

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Ala	Leu	Arg	Val	Trp	Gly	Val	Gly	Asn	Glu	Ala	Gly	Val	Gly	Pro	Gly
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Leu	Gly	Glu	Trp	Ala	Val	Val	Thr	Gly	Ser	Thr	Asp	Gly	Ile	Gly	Lys
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Ile	Leu	Val	Asn	Asn	Val	Gly	Met	Ser	Tyr	Glu	Tyr	Pro	Glu	Tyr	Phe
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 Val Asp Phe Phe Ser Gln Cys Leu His Glu Glu Tyr Arg Ser Lys Gly
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 Val Phe Val Gln Ser Val Leu Pro Tyr Phe Val Ala Thr Lys Leu Ala
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 Lys Ser Ala Ile Lys Thr Val Gly Leu Gln Ser Arg Thr Asn Gly Tyr
 260 265 270
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<211> 5945

<212> DNA

<213> Homo sapiens

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<211> 412

<212> PRT

<213> Homo sapiens

<400> 3170

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Ala	Tyr	Gln	Gly	Ile	Thr	Gln	Glu	Lys	Ile	Asn	Glu	Met	Arg	Val	Ala
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Pro	Glu	Gln	Gln	Met	Ile	Ala	Asp	Ile	His	Cys	Met	Ile	Ala	Ala	Gly
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Gln	Asp	Leu	Asp	Trp	Ile	Asp	Ala	Gln	Gly	Ala	Thr	Leu	Leu	His	Ile
65					70					75					80
Ala	Gly	Ala	Asn	Gly	Tyr	Leu	Arg	Ala	Ala	Glu	Leu	Leu	Leu	Asp	His
				85						90					95
Gly	Val	Arg	Val	Asp	Val	Lys	Asp	Trp	Asp	Gly	Trp	Glu	Pro	Leu	His
			100					105					110		
Ala	Ala	Ala	Phe	Trp	Gly	Gln	Met	Gln	Met	Ala	Glu	Leu	Leu	Val	Ser
			115				120					125			
His	Gly	Ala	Ser	Leu	Ser	Ala	Arg	Thr	Ser	Met	Asp	Glu	Met	Pro	Ile
			130			135					140				
Asp	Leu	Cys	Glu	Glu	Glu	Glu	Phe	Lys	Val	Leu	Leu	Leu	Glu	Leu	Lys
145					150					155					160
His	Lys	His	Asp	Val	Ile	Met	Lys	Ser	Gln	Leu	Arg	His	Lys	Ser	Ser
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Leu	Ser	Arg	Arg	Thr	Ser	Ser	Ala	Gly	Ser	Arg	Gly	Lys	Val	Val	Arg
			180					185					190		
Arg	Ala	Ser	Leu	Ser	Asp	Arg	Thr	Asn	Leu	Tyr	Arg	Lys	Glu	Tyr	Glu
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Ser	Thr	Tyr	Asn	Gly	Asp	Ile	Arg	Glu	Thr	Arg	Thr	Asp	Gln	Glu	Asn
225					230					235					240
Lys	Asp	Pro	Asn	Pro	Arg	Leu	Glu	Lys	Pro	Val	Leu	Leu	Ser	Glu	Phe
				245					250					255	
Pro	Thr	Lys	Ile	Pro	Arg	Gly	Glu	Leu	Asp	Met	Pro	Val	Glu	Asn	Gly
			260				265						270		
Leu	Arg	Ala	Pro	Val	Ser	Ala	Tyr	Gln	Tyr	Ala	Leu	Ala	Asn	Gly	Asp

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Val Trp Lys Val His Glu	Val Pro Asp Tyr Ser Met	Ala Tyr Gly Asn
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Pro Gly Val Ala Asp Ala Thr	Pro Pro Trp Ser Ser Tyr Lys Glu Gln	
305	310	315
Ser Pro Gln Thr Leu Leu Glu Leu Lys Arg Gln Arg Ala Ala Ala Lys		320
	325	330
Leu Leu Ser His Pro Phe Leu Ser Thr His Leu Gly Ser Ser Met Ala		335
	340	345
Arg Thr Gly Glu Ser Ser Ser Glu Gly Lys Ala Xaa Leu Ile Gly Gly		350
	355	360
Arg Thr Ser Pro Tyr Ser Ser Asn Gly Thr Ser Val Tyr Thr Val		365
	370	375
Thr Ser Gly Asp Pro Pro Leu Leu Lys Phe Lys Ala Pro Ile Glu Glu		380
385	390	395
Met Glu Glu Lys Val His Gly Cys Cys Arg Ile Ser		400
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<210> 3171

<211> 753

<212> DNA

<213> Homo sapiens

<400> 3171

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<210> 3172

<211> 228

<212> PRT

<213> Homo sapiens

<400> 3172

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Gly Thr Ser Asp Ala Glu Thr Ser Ala Leu His Ile Val Val Gly Asp
      35           40           45
Ser Leu Ala Met Asp Val Ser Ser Val His His Asn Ser Thr Leu Leu
 50           55           60
Arg Tyr Ser Val Ser Leu Gly Tyr Gly Phe Tyr Gly Asp Ile Ile
65           70           75           80
Lys Asp Ser Glu Lys Lys Arg Trp Leu Gly Leu Ala Arg Tyr Asp Phe
          85           90           95
Ser Gly Leu Lys Thr Phe Leu Ser His His Cys Tyr Glu Gly Thr Val
      100           105           110
Ser Phe Leu Pro Ala Gln His Thr Val Gly Ser Pro Arg Asp Arg Lys
     115           120           125
Pro Cys Arg Ala Gly Cys Phe Val Cys Arg Gln Ser Lys Gln Gln Leu
    130           135           140
Glu Glu Glu Gln Lys Lys Ala Leu Tyr Gly Leu Glu Ala Ala Glu Asp
   145           150           155           160
Val Glu Glu Trp Gln Val Val Cys Gly Lys Phe Leu Ala Ile Asn Ala
      165           170           175
Thr Asn Met Ser Cys Ala Cys Arg Arg Ser Pro Arg Gly Leu Ser Pro
     180           185           190
Ala Ala His Leu Gly Asp Gly Ser Ser Asp Leu Ile Leu Ile Arg Lys
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Cys Ser Arg Phe Asn Phe Leu Arg Phe Leu Ile Trp His Glu Val Cys
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Lys Lys Pro Leu
225

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<210> 3173

<211> 573

<212> DNA

<213> Homo sapiens

<400> 3173

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420

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<210> 3174
 <211> 152
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Val Ala Gln Tyr Phe Arg Glu Lys Tyr Thr Leu Gln Leu Lys Tyr Pro
 50 55 60
 His Leu Pro Cys Leu Gln Val Gly Gln Glu Gln Lys His Thr Tyr Leu
 65 70 75 80
 Pro Leu Glu Val Cys Asn Ile Val Ala Gly Gln Arg Cys Ile Lys Lys
 85 90 95
 Leu Thr Asp Asn Gln Thr Ser Thr Met Ile Lys Ala Thr Ala Arg Ser
 100 105 110
 Ala Pro Asp Arg Gln Glu Glu Ile Ser Arg Leu Val Arg Ser Ala Asn
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 Tyr Glu Thr Asp Pro Phe Val Gln Glu Phe Gln Phe Lys Val Arg Asp
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 Glu Met Ala His Val Thr Gly Arg
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<210> 3175
 <211> 948
 <212> DNA
 <213> Homo sapiens

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 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 3176
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 35 40 45
 Arg Gly Asn Glu Tyr Gln Pro Ser Asn Ile Lys Arg Lys Asn Lys His
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 Gly Trp Val Arg Arg Leu Ser Thr Pro Ala Gly Val Gln Val Ile Leu
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 Arg Arg Met Leu Lys Gly Arg Lys Ser Leu Ser His
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<210> 3177
 <211> 1857
 <212> DNA
 <213> Homo sapiens

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<210> 3178

<211> 273
 <212> PRT
 <213> Homo sapiens

<400> 3178

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Leu Leu Ser Asn Leu Ala Thr Arg Leu Trp Leu Arg Asn Gly Ala Pro
          50           55           60
Val Asn Ala Ser Ala Ser Cys His Val Leu Pro Thr Gly Asp Leu Leu
65           70           75           80
Leu Val Gly Thr Gln Gln Leu Gly Glu Phe Gln Cys Trp Ser Leu Glu
          85           90           95
Glu Gly Phe Gln Gln Leu Val Ala Ser Tyr Cys Pro Glu Val Val Glu
          100          105          110
Asp Gly Val Ala Asp Gln Thr Asp Glu Gly Gly Ser Val Pro Val Ile
          115          120          125
Ile Ser Thr Ser Arg Val Ser Ala Pro Ala Gly Gly Lys Ala Ser Trp
          130          135          140
Gly Ala Asp Arg Ser Tyr Trp Lys Glu Phe Leu Val Met Cys Thr Leu
145          150          155          160
Phe Val Leu Ala Val Leu Leu Pro Val Leu Phe Leu Leu Tyr Arg His
          165          170          175
Arg Asn Ser Met Lys Val Phe Leu Lys Gln Gly Glu Cys Ala Ser Val
          180          185          190
His Pro Lys Thr Cys Pro Val Val Leu Pro Pro Glu Thr Arg Pro Leu
          195          200          205
Asn Gly Leu Gly Pro Pro Ser Thr Pro Leu Asp His Arg Gly Tyr Gln
          210          215          220
Ser Leu Ser Asp Ser Pro Pro Gly Ala Arg Val Phe Thr Glu Ser Glu
225          230          235          240
Lys Arg Pro Leu Ser Ile Gln Asp Ser Phe Val Glu Val Ser Pro Val
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Cys Pro Arg Pro Arg Val Arg Leu Gly Ser Glu Ile Arg Asp Ser Val
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<210> 3179
 <211> 3447
 <212> DNA
 <213> Homo sapiens

<400> 3179

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180
  
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1260
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1920
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1980
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2100
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2160
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2760
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<210> 3180

<211> 127

<212> PRT

<213> Homo sapiens

<400> 3180

Met	Ser	Phe	Thr	Asn	Lys	Ser	Arg	Gln	Val	Ser	Gln	Pro	Glu	Ile	Ser
1				5				10						15	
Thr	Gln	Thr	Asp	Gly	Arg	Asp	Val	Asn	Ser	Cys	Leu	Lys	Leu	Arg	Cys
			20				25						30		
Ala	Phe	Thr	Pro	Thr	Gly	Lys	Val	Lys	Leu	Thr	Phe	Val	Phe	Leu	Phe
			35				40						45		
Asn	Asn	Phe	Met	Ile	Asn	Lys	Glu	Leu	Gln	Leu	Glu	Thr	Lys	Ala	Asn
			50				55					60			
Ser	Arg	Asn	Ser	Leu	Thr	Pro	Ser	Cys	Pro	Met	Val	Phe	Met	Ile	Ala
65					70					75					80
Cys	Tyr	Gln	Asn	Glu	Ala	Leu	Cys	Ser	Thr	Leu	Tyr	Ser	Lys	Ala	Phe
					85					90				95	
Tyr	Ala	Pro	Thr	Arg	Pro	Ser	Gly	Ile	Pro	Glu	Ser	Ala	Leu	His	Thr
			100					105					110		
Gly	Arg	Lys	Thr	Ala	Ser	Ser	Tyr	Arg	Leu	Cys	Glu	Asn	Thr	Gln	
			115					120					125		

<210> 3181

<211> 287

<212> DNA

<213> Homo sapiens

<400> 3181

natggcttcc tccccggcgg tggacgtgtc ctgcaggcgg cgggggagaac ggcggcagct
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120
cctcaaggac ggctgggctt ctccctgcac tcgcagctcg ccaagtctct gttggaccgg
180
tacattctt caggctgtgt cctctgtgca ggtcctgagc ttttgctcc aaaaggtctg
240
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287

<210> 3182

<211> 95

<212> PRT

<213> Homo sapiens

<400> 3182

Met	Ala	Ser	Ser	Pro	Ala	Val	Asp	Val	Ser	Cys	Arg	Arg	Arg	Gly	Glu
1				5					10					15	
Arg	Arg	Gln	Leu	Asp	Ala	Arg	Arg	Asn	Lys	Cys	Arg	Ile	Arg	Leu	Gly
			20					25					30		
Gly	His	Met	Lys	Gln	Gly	Gly	Leu	Leu	Lys	Asp	Gly	Trp	Ala	Ser	Pro

	35					40					45								
Cys	Thr	Arg	Ser	Ser	Pro	Ser	Ser	Cys	Trp	Thr	Gly	Thr	Leu	Leu	Gln				
	50					55					60								
Ala	Val	Ser	Ser	Val	Gln	Val	Leu	Ser	Phe	Cys	Leu	Gln	Lys	Val	Cys				
65					70					75					80				
Ser	Ile	Trp	Cys	Ser	Cys	Leu	Met	Pro	His	Thr	Gly	Asp	Ala	Pro					
				85					90					95					

<210> 3183

<211> 1457

<212> DNA

<213> Homo sapiens

<400> 3183

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ncgtacgtgt catgcattgt catgacaccc tcattgtgtg tcgcatgtcc ccaattgatc
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120
aaagttctcc ctgagagctg caggctgtcc tggaatctcc tcggggatga ggcagctgcc
180
gagctggccc aggtgctgcc gcagatgggc cggctgaaga gaggggacct ggagaagaat
240
cagatcacag ctttgggggc ctggctcctg gctgaaggac tggcccaggg gtctagcatc
300
caagtcaccc gcctctggaa taacccatt ccctgcgaca tggcccagca cctgaagagc
360
caggagccca ggctggactt tgccctcttt gacaaccagc cccaggcccc ttgggggtact
420
tgatggcccc ctcaagacct ttggaatcca gccaaagtat gcacccaaat gatccacctt
480
tcgcccactg ggataaatga ctcaggaaag aagagcctcg gcagggcgct ctgcactcca
540
cccaggagga aggatacgtg tgcctctgct cagtcctcag ggagaacttt tttgggaacc
600
aggagctggg tctggacaaa ggagtaccct gcattacgtg ggatatgtgt gatcaattgg
660
ggacatgcca cacacaatga ggggtgtcatg acaatgcatg acacgtacgg ttatatgtgg
720
cagtgtgacc ccttgacatg tggcggtaca tgaaagtcag tgtggcacgt gttctgtggc
780
atgggtgctg gcaccccaag tggcaggata catgattggt ggtctatata tgacacatga
840
caaatgtcca tgacacagga ctcatggctg gccagatgac ctcaggctgg cccaagatct
900
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960
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1020
ggctcaaggg ccagggtctt ggaacaagcc agggactcag ccattaagtc ccctcctgcc
1080
tcaatcctca gcctacccat ctataaaact gatgactcct cccttactta catactagct
1140
tccaaggaca ggtggaggta gggccagcct ggcgggagtg gagaagccca gtctgtccta
1200

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tgtaagggac aaagccaggt ctaatggtac tgggtagggg gcactgccaa gacaataagc
 1260
 taggctactg ggtccagcta ctactttggt gggattcagg tgagtctcca tgcacttcac
 1320
 atgttaccca gtgttcttgt tacttccaag gagaaccaag aatggctctg tcacactcga
 1380
 agccaggttt gatcaataaa cacaatggta ttccaaaaaa aaaaaaaaaa aaaaaaaaaa
 1440
 aaaaaaaaaa aaaaaaa
 1457

<210> 3184

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3184

Xaa	Tyr	Val	Ser	Cys	Ile	Val	Met	Thr	Pro	Ser	Leu	Cys	Val	Ala	Cys
1				5					10					15	
Pro	Gln	Leu	Ile	Thr	His	Ile	Pro	Arg	Asn	Ala	Gly	Tyr	Ser	Phe	Val
			20					25					30		
Gln	Thr	Gln	Leu	Leu	Val	Pro	Lys	Val	Leu	Pro	Glu	Ser	Cys	Arg	
		35					40				45				
Leu	Ser	Trp	Asn	Leu	Leu	Gly	Asp	Glu	Ala	Ala	Ala	Glu	Leu	Ala	Gln
	50					55					60				
Val	Leu	Pro	Gln	Met	Gly	Arg	Leu	Lys	Arg	Val	Asp	Leu	Glu	Lys	Asn
65					70				75					80	
Gln	Ile	Thr	Ala	Leu	Gly	Ala	Trp	Leu	Leu	Ala	Glu	Gly	Leu	Ala	Gln
			85					90					95		
Gly	Ser	Ser	Ile	Gln	Val	Ile	Arg	Leu	Trp	Asn	Asn	Pro	Ile	Pro	Cys
			100					105				110			
Asp	Met	Ala	Gln	His	Leu	Lys	Ser	Gln	Glu	Pro	Arg	Leu	Asp	Phe	Ala
	115						120				125				
Phe	Phe	Asp	Asn	Gln	Pro	Gln	Ala	Pro	Trp	Gly	Thr				
	130					135					140				

<210> 3185

<211> 1433

<212> DNA

<213> Homo sapiens

<400> 3185

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 120
 cctggtaacc tgaggaggtg tagagcacc agaaggaagg gtaaaagcag ggggcaaagc
 180
 ggtggccctc cttttctggg ggtcacttct gggctggggc cagctgaaac ctgtgtccaa
 240
 gtagctttca gggctggcca caccctaagc cttgcaaaaag ggctcctgc aagggtggc
 300
 ccatggggtc ccaccttcc cagccagtga ggtagcatg gtaggagtc cacatgtgtg
 360

caagtgcttg tgtggaggct catgtatgca tgtgtgtata tgcaaagctg cacatgacaa
 420
 tgtgcatgcc agtccagagt tagatgtacc tatgcagttg ccctcaagcg aagggtcata
 480
 tttggaaaca aggatggctc taaacatgta agcgtgcatg tgggcatgta tgtatctggg
 540
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 600
 aggaggagtg ggtgggaggg aaaggctggg cagagcaggg gaaggagtga aagccaggca
 660
 ggaaagtgga agaacaggag aagctcatgt aatggattac cctccacagg attatgttcc
 720
 ttgattcctg agagtttttt ctcttgattt taccctctca gtctatcact gcaagagaaa
 780
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 ctgttgcatg tgcattgagc agagcctggg agagaagaga gagcgtgcaa gagagagctc
 900
 agagcaggca ggcagccac cccctgcagc agtgctgggc ttcactggag cccctgcagg
 960
 aagtccagca gccctgtatg ccactcctct ggtttgtcca ggtaacaggg gtgccccgcc
 1020
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 1200
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 1320
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 1380
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 1433

<210> 3186

<211> 112

<212> PRT

<213> Homo sapiens

<400> 3186

Met	Pro	Leu	Leu	Trp	Phe	Val	Gln	Val	Thr	Gly	Val	Pro	Arg	Pro	Leu
1				5					10					15	
His	Asp	Gln	His	Pro	Val	Val	Gly	Gln	Leu	Leu	Gln	Val	Leu	Lys	Ala
			20					25					30		
Gly	Leu	Thr	His	Gly	Val	Leu	Val	Ser	Ile	Tyr	Asn	Gln	Ser	Trp	Ser
			35				40					45			
Leu	Arg	Gly	Arg	Ile	Gly	Gly	Trp	Gly	Arg	Val	Asn	Arg	Thr	Cys	His
		50			55					60					
Ser	Ile	Pro	Ser	Pro	Pro	His	Phe	Ser	Leu	Phe	Leu	Gly	Pro	Pro	His
65				70					75					80	
Met	Arg	Glu	Arg	Asp	Lys	Leu	Ala	Gln	Trp	Val	Gly	Ala	Gln	Ile	Gly

				85					90					95				
Val	Cys	Pro	Arg	Thr	Gln	Phe	Ser	Thr	Gly	Leu	Gly	Thr	Val	Val	Cys			
				100					105					110				

<210> 3187

<211> 860

<212> DNA

<213> Homo sapiens

<400> 3187

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120
aagtggtcct cccgcctcgg cctcctgagt agctgggatt acagatatgt tcctaaaaca
180
tccttgagtt caccaccttg gccagaagtt gttctgccag acccagttga ggagaccaga
240
caccatgcag aggtcgtgaa gaaggtgaat gagatgatcg tcacgggggca gtatggcagg
300
ctctttgccg tgggtgcactt tgccagccgc cagtgggaagg tgacctctga agacctgatc
360
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420
ctgggtgggg cagacaactt cacgctgctt ggcaagccac tcctcgggta atggctgtga
480
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540
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600
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660
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720
ggtgtggggc acgtgggtct cgggacagga agcccaggca ggtctcaacc tggctgccac
780
tgcccacttg ccacctcat cctagaggga gcaccagag ggtccagcct cgctcccctt
840
ctcctccacg ctccacgctg
860

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<210> 3188

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3188

Thr	Pro	Gly	Leu	Lys	Trp	Ser	Ser	Arg	Leu	Gly	Leu	Leu	Ser	Ser	Trp			
1				5					10				15					
Asp	Tyr	Arg	Tyr	Val	Pro	Lys	Thr	Ser	Leu	Ser	Ser	Pro	Pro	Trp	Pro			
			20					25				30						
Glu	Val	Val	Leu	Pro	Asp	Pro	Val	Glu	Glu	Thr	Arg	His	His	Ala	Glu			
		35				40					45							
Val	Val	Lys	Lys	Val	Asn	Glu	Met	Ile	Val	Thr	Gly	Gln	Tyr	Gly	Arg			

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      50              55              60
Leu Phe Ala Val Val His Phe Ala Ser Arg Gln Trp Lys Val Thr Ser
65              70              75              80
Glu Asp Leu Ile Leu Ile Gly Asn Glu Leu Asp Leu Ala Cys Gly Glu
      85              90              95
Arg Ile Arg Leu Glu Lys Val Leu Leu Val Gly Ala Asp Asn Phe Thr
      100              105              110
Leu Leu Gly Lys Pro Leu Leu Gly
      115              120

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<210> 3189

<211> 440

<212> DNA

<213> Homo sapiens

<400> 3189

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agcctgggga agcaagtccc tgttttcagt accacctgca tccccaggg cagcatcctt
120
gactccccctt ctggggccagt gctgccctgc tttctctgtc tctttcaggg tgtgctgtcc
180
gacctacca aagtgaccgg gatgcatgga atcgaccctg tgggtgctggt cctgatgggtg
240
ggcatgggtga tgttcaccct ggggttcgcc ggctgcgtgg gggctctgcg ggagaatata
300
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360
caggctctgc tgggcaggat tatatgttac ctggtcagag cagggtggcag ctcttaggag
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<210> 3190

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3190

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Gly His Gly Trp Gly Arg Thr Leu Ala Trp Leu Ser Thr Arg Gly Leu
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Ser Leu Gly Lys Gln Val Pro Val Phe Ser Thr Thr Cys Ile Pro Gln
      20              25              30
Gly Ser Ile Leu Asp Ser Pro Ser Gly Pro Val Leu Pro Cys Phe Leu
      35              40              45
Cys Leu Phe Gln Gly Val Leu Ser Asp Leu Thr Lys Val Thr Arg Met
      50              55              60
His Gly Ile Asp Pro Val Val Leu Val Leu Met Val Gly Met Val Met
65              70              75              80
Phe Thr Leu Gly Phe Ala Gly Cys Val Gly Ala Leu Arg Glu Asn Ile
      85              90              95
Cys Leu Leu Asn Phe Val Ser Gly His Arg Asp Lys Ser Gly Ile
      100              105              110

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<210> 3191
 <211> 266
 <212> DNA
 <213> Homo sapiens

<400> 3191
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 120
 aacagcagga caatccacac ttccgtagcc tcctgggggtc ggccgcccag ccagcccggg
 180
 gcccgccgcc ccagcaccgc ttgcagggca gaaaagagaa gagagttgac aacatcgaga
 240
 tacagaaatt catctcccaa aaagcg
 266

<210> 3192
 <211> 84
 <212> PRT
 <213> Homo sapiens

<400> 3192
 Met Asn Phe Cys Ile Ser Met Leu Ser Thr Leu Phe Ser Phe Leu Pro
 1 5 10 15
 Cys Asn Gly Cys Trp Gly Gly Gly Pro Arg Ala Gly Ser Ala Ala Asp
 20 25 30
 Pro Arg Arg Leu Arg Lys Cys Gly Leu Ser Cys Cys Ser Leu Arg Ser
 35 40 45
 Arg Glu Ser Lys Asp Asp Pro Trp Gln Phe Ser Asp Cys Arg Lys Arg
 50 55 60
 Ser Arg Ser Met Ala Gln Val Ala Asp Thr Glu Gln Gly Thr Ile Ser
 65 70 75 80
 Pro Ser Ala Ser

<210> 3193
 <211> 567
 <212> DNA
 <213> Homo sapiens

<400> 3193
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 120
 tggagtgagt tgttttgccc ctctgagcct cagtttctcc atctgtgaaa tggggacaac
 180
 agcagttcct tccaggaggg taaaaggagg agaaaaagaa tgcagatcca gccctcggca
 240
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 atccagacct gggttaacta ctgtcttcct tatgttggtc ctgtggggac gcctggggct
 360

gctggcctcg tgattcctct ctttcctgc aggccacggt tcacctactt ccccttctcc
 420
 ctgggccacc gctcctgcat cgggcagcag tttgctcaga tggagggtgaa ggtgggtcatg
 480
 gcaaagctgc tgcagaggct ggagttccgg ctggtgcccg ggcagcgctt cgggctgcag
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 567

<210> 3194

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3194

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1				5					10					15	
Lys	Cys	Pro	Ala	Pro	Gly	Ser	Lys	Ser	Val	Phe	Ile	Gln	Thr	Trp	Val
			20					25					30		
Asn	Tyr	Cys	Leu	Pro	Tyr	Val	Val	Pro	Val	Gly	Thr	Pro	Gly	Ala	Ala
			35				40					45			
Gly	Leu	Val	Ile	Pro	Leu	Phe	Pro	Cys	Arg	Pro	Arg	Phe	Thr	Tyr	Phe
	50					55				60					
Pro	Phe	Ser	Leu	Gly	His	Arg	Ser	Cys	Ile	Gly	Gln	Gln	Phe	Ala	Gln
65					70					75					80
Met	Glu	Val	Lys	Val	Met	Ala	Lys	Leu	Gln	Arg	Leu	Glu	Phe		
			85					90				95			
Arg	Leu	Val	Pro	Gly	Gln	Arg	Phe	Gly	Leu	Gln	Glu	Gln	Ala	Thr	Leu
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<210> 3195

<211> 987

<212> DNA

<213> Homo sapiens

<400> 3195

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<211> 833

<212> PRT

<213> Homo sapiens

<400> 3198

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			20					25					30		
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			35				40					45			
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Val	Lys	Pro	Gln	Val	Phe	Gln	Ser	His	Cys	Glu	Arg	Arg	His	Gly	Ser
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			100					105					110		
Thr	Ser	Leu	Val	Gln	Val	Lys	Thr	Lys	Ala	Cys	Leu	Ser	Gly	His	His
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Pro	Asn	Leu	Val	Lys	Ala	Asp	Gly	Ala	Asn	Val	Lys	Met	Asn	Ser	Thr
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Thr	Thr	Thr	Ala	Val	Ser	Ala	Ser	Pro	Thr	Ser	Ser	Ser	Ala	Val	Ser

2411

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 785 790 795 800
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<210> 3199

<211> 777

<212> DNA

<213> Homo sapiens

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<211> 92

<212> PRT

<213> Homo sapiens

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			20					25					30		
Asp	Thr	Leu	Phe	Gly	Ala	Leu	Arg	Phe	Leu	Ala	Ser	Pro	Ser	Phe	Trp
		35					40					45			
Val	Ser	Pro	Arg	Ser	Pro	Val	Pro	Ala	Val	Gly	Ala	Ala	Cys	Cys	Met
	50					55				60					
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<210> 3201

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<212> DNA

<213> Homo sapiens

<400> 3201

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<213> Homo sapiens

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Val Ala Glu Gly Pro Gly Gly Val Gln Val Pro Asn Pro Ser Glu Pro			
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Asp Pro Asp Met Gly Pro Val Ser Trp Gly Pro Pro Leu Cys Pro Val			
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Val Ala Asp Pro Glu Arg Glu Gly Cys Gly Asp Ala His Met Thr Leu			
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<210> 3203

<211> 1906

<212> DNA

<213> Homo sapiens

<400> 3203

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 1906

<210> 3204

<211> 424

<212> PRT

<213> Homo sapiens

<400> 3204

Met	Ala	Pro	Glu	Glu	Asp	Ala	Gly	Gly	Glu	Ala	Leu	Gly	Gly	Ser	Phe
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Trp	Glu	Ala	Gly	Asn	Tyr	Arg	Arg	Thr	Val	Gln	Arg	Val	Glu	Asp	Gly
			20					25					30		
His	Arg	Leu	Cys	Gly	Asp	Leu	Val	Ser	Cys	Phe	Gln	Glu	Arg	Ala	Arg
		35					40					45			
Ile	Glu	Lys	Ala	Tyr	Ala	Gln	Gln	Leu	Ala	Asp	Trp	Ala	Arg	Lys	Trp
	50					55				60					
Arg	Gly	Thr	Val	Glu	Lys	Gly	Pro	Gln	Tyr	Gly	Thr	Leu	Glu	Lys	Ala
65					70				75					80	
Trp	His	Ala	Phe	Phe	Thr	Ala	Ala	Glu	Arg	Leu	Ser	Ala	Leu	His	Leu
			85					90					95		
Glu	Val	Arg	Glu	Lys	Leu	Gln	Gly	Gln	Asp	Ser	Glu	Arg	Val	Arg	Ala
		100					105						110		
Trp	Gln	Arg	Gly	Ala	Phe	His	Arg	Pro	Val	Leu	Gly	Gly	Phe	Arg	Glu

115 120 125
 Ser Arg Ala Ala Glu Asp Gly Phe Arg Lys Ala Gln Lys Pro Trp Leu
 130 135 140
 Lys Arg Leu Lys Glu Val Glu Ala Ser Lys Lys Ser Tyr His Ala Ala
 145 150 155 160
 Arg Lys Asp Glu Lys Thr Ala Gln Thr Arg Glu Ser His Ala Lys Ala
 165 170 175
 Asp Ser Ala Val Ser Gln Glu Gln Leu Arg Lys Leu Gln Glu Arg Val
 180 185 190
 Glu Arg Cys Ala Lys Glu Ala Glu Lys Thr Lys Ala Gln Tyr Glu Gln
 195 200 205
 Thr Leu Ala Glu Leu His Arg Tyr Thr Pro Arg Tyr Met Glu Asp Met
 210 215 220
 Glu Gln Ala Phe Glu Thr Cys Gln Ala Ala Glu Arg Gln Arg Leu Leu
 225 230 235 240
 Phe Phe Lys Asp Met Leu Leu Thr Leu His Gln His Leu Asp Leu Ser
 245 250 255
 Ser Ser Glu Lys Phe His Glu Leu His Arg Asp Leu His Gln Gly Ile
 260 265 270
 Glu Ala Ala Ser Asp Glu Glu Asp Leu Arg Trp Trp Arg Ser Thr His
 275 280 285
 Gly Pro Gly Met Ala Met Asn Trp Pro Gln Phe Glu Glu Trp Ser Leu
 290 295 300
 Asp Thr Gln Arg Thr Ile Ser Arg Lys Glu Lys Gly Gly Arg Ser Pro
 305 310 315 320
 Asp Glu Val Thr Leu Thr Ser Ile Val Pro Thr Arg Asp Gly Thr Ala
 325 330 335
 Pro Pro Pro Gln Ser Pro Gly Ser Pro Gly Thr Gly Gln Asp Glu Glu
 340 345 350
 Trp Ser Asp Glu Glu Ser Pro Arg Lys Ala Ala Thr Gly Val Arg Val
 355 360 365
 Arg Ala Leu Tyr Asp Tyr Ala Gly Gln Glu Ala Asp Glu Leu Ser Phe
 370 375 380
 Arg Ala Gly Glu Glu Leu Leu Lys Met Ser Glu Glu Asp Glu Gln Gly
 385 390 395 400
 Trp Cys Gln Gly Gln Leu Gln Ser Gly Arg Ile Gly Leu Tyr Pro Ala
 405 410 415
 Asn Tyr Val Glu Cys Val Gly Ala
 420

<210> 3205

<211> 1482

<212> DNA

<213> Homo sapiens

<400> 3205

nnggagatgg agggaaacctc cccgagcagc ccaccaccca gtgggggtgcg gtcccccccg
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 ggtctggcca agacaccctt atctgctctg ggcctgaaac ctcacaaccc agcggacatc
 120
 ctgttgacc ccacaggaga gccccggagc tatgtggagt ctgtggcacg gacagcgggtg
 180
 gctggacccc gagctcagga ctctgagccc aagagcttta gtgctccagc caccagggcc
 240

tatggccatg agatacccct gaggaacggg accctgggtg gctcctttgt ctcccccagc
 300
 cccctctcca ccagcagccc catcctcagt gctgacagca cttcagtggg gagtttcccg
 360
 tcgggagaga gcagtgacca ggggtccccg acgcccaccc agcctctgtt ggagtctggc
 420
 ttccgctcag gcagcctggg acagcccagc ccgtctgccc agagaaacta ccagagctct
 480
 tctcctctcc cgactgtggg cagtagctac agcagccccg actactcact tcagcatttc
 540
 agctcctctc cggaaagcca ggctcgagct cagttcagtg tggctggcgt ccacacgggtg
 600
 cctgggagcc ctcaggcgcg tcacagaaca gtgggcacca acactcccc tagtcctggc
 660
 ttccgctggc gggccatcaa tcccagcatg gctgccccca gcagtcccag tttgagccat
 720
 caccagatga tgggtccacc aggcactggc ttccatggta gcactgtctc cagccccag
 780
 agcagtgcag cgaccacccc ggggagcccc agcctgtgtc ggcacccagc aggggtctac
 840
 caggtttctg gcctccacaa caaagtggcc accaccccgg ggagtcccag cctgggcccg
 900
 caccctgggg ctcaccaagg caacctggcc tccgggtctt atagcaatgc aatagccagc
 960
 cctggaagcc ccagcctggg ccgtcacctc ggagggctct gatctgtggt tcccggcagc
 1020
 ccctgcttgg accggcatgt ggcctatggc ggctattcta ccccgaggga tcggagaccc
 1080
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 1140
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 1200
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 1260
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 1320
 gtcgccagcg gcatgtccag tcccagtggg ggcagcaccg tctccttctc ccacactctg
 1380
 cccgacttct ccaagtactc catgccagac aacagcccgg agacgcgggc taaagtgaag
 1440
 ttgtccagg acatttctaa gtattggtac aagcctaaga tc
 1482

<210> 3206
 <211> 494
 <212> PRT
 <213> Homo sapiens

<400> 3206
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 Arg Ser Pro Pro Gly Leu Ala Lys Thr Pro Leu Ser Ala Leu Gly Leu
 20 25 30
 Lys Pro His Asn Pro Ala Asp Ile Leu Leu His Pro Thr Gly Glu Pro

		35					40					45				
Arg	Ser	Tyr	Val	Glu	Ser	Val	Ala	Arg	Thr	Ala	Val	Ala	Gly	Pro	Arg	
	50					55					60					
Ala	Gln	Asp	Ser	Glu	Pro	Lys	Ser	Phe	Ser	Ala	Pro	Ala	Thr	Gln	Ala	
65					70					75					80	
Tyr	Gly	His	Glu	Ile	Pro	Leu	Arg	Asn	Gly	Thr	Leu	Gly	Gly	Ser	Phe	
				85					90					95		
Val	Ser	Pro	Ser	Pro	Leu	Ser	Thr	Ser	Ser	Pro	Ile	Leu	Ser	Ala	Asp	
			100					105					110			
Ser	Thr	Ser	Val	Gly	Ser	Phe	Pro	Ser	Gly	Glu	Ser	Ser	Asp	Gln	Gly	
		115					120					125				
Pro	Arg	Thr	Pro	Thr	Gln	Pro	Leu	Leu	Glu	Ser	Gly	Phe	Arg	Ser	Gly	
	130					135					140					
Ser	Leu	Gly	Gln	Pro	Ser	Pro	Ser	Ala	Gln	Arg	Asn	Tyr	Gln	Ser	Ser	
145				150						155					160	
Ser	Pro	Leu	Pro	Thr	Val	Gly	Ser	Ser	Tyr	Ser	Ser	Pro	Asp	Tyr	Ser	
				165					170					175		
Leu	Gln	His	Phe	Ser	Ser	Ser	Pro	Glu	Ser	Gln	Ala	Arg	Ala	Gln	Phe	
			180					185					190			
Ser	Val	Ala	Gly	Val	His	Thr	Val	Pro	Gly	Ser	Pro	Gln	Ala	Arg	His	
		195					200					205				
Arg	Thr	Val	Gly	Thr	Asn	Thr	Pro	Pro	Ser	Pro	Gly	Phe	Gly	Trp	Arg	
	210					215					220					
Ala	Ile	Asn	Pro	Ser	Met	Ala	Ala	Pro	Ser	Ser	Pro	Ser	Leu	Ser	His	
225					230					235					240	
His	Gln	Met	Met	Gly	Pro	Pro	Gly	Thr	Gly	Phe	His	Gly	Ser	Thr	Val	
				245					250					255		
Ser	Ser	Pro	Gln	Ser	Ser	Ala	Ala	Thr	Thr	Pro	Gly	Ser	Pro	Ser	Leu	
			260					265					270			
Cys	Arg	His	Pro	Ala	Gly	Val	Tyr	Gln	Val	Ser	Gly	Leu	His	Asn	Lys	
		275					280					285				
Val	Ala	Thr	Thr	Pro	Gly	Ser	Pro	Ser	Leu	Gly	Arg	His	Pro	Gly	Ala	
	290					295					300					
His	Gln	Gly	Asn	Leu	Ala	Ser	Gly	Leu	His	Ser	Asn	Ala	Ile	Ala	Ser	
305					310					315					320	
Pro	Gly	Ser	Pro	Ser	Leu	Gly	Arg	His	Leu	Gly	Gly	Ser	Gly	Ser	Val	
				325					330					335		
Val	Pro	Gly	Ser	Pro	Cys	Leu	Asp	Arg	His	Val	Ala	Tyr	Gly	Gly	Tyr	
			340					345					350			
Ser	Thr	Pro	Glu	Asp	Arg	Arg	Pro	Thr	Leu	Ser	Arg	Gln	Ser	Ser	Ala	
		355					360					365				
Ser	Gly	Tyr	Gln	Ala	Pro	Ser	Thr	Pro	Ser	Phe	Pro	Val	Ser	Pro	Ala	
	370					375					380					
Tyr	Tyr	Pro	Gly	Leu	Ser	Ser	Pro	Ala	Thr	Ser	Pro	Ser	Pro	Asp	Ser	
385					390					395					400	
Ala	Ala	P														

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<210> 3207
<211> 495
<212> DNA
<213> Homo sapiens
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<210> 3208
<211> 107
<212> PRT
<213> Homo sapiens
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<210> 3209
<211> 346
<212> DNA
<213> Homo sapiens
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<400> 3209
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 tgcgtccagc cttgtccett ctgacctggg ccctacccac ggggaaatgt tcccatagca
 120
 gaagaatcag cccacagtg caggggtgtg ttagtgggga acgggctctg ggctcctgtg
 180
 ggaaccaggg accccctatc ttggtaccgg tcattggatg tatccccagc tcatgcctgt
 240
 gtctgtcttg gccgtgtgg tcacctgtg ttcattcttc tcccagccat ggcctctcaa
 300
 actgggggtt tegtctcct atgaggggggt cctgggtatgt acgcgt
 346

<210> 3210
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 3210
 Met Arg Pro Ala Leu Ser Leu Leu Thr Trp Ala Leu Pro Thr Gly Lys
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 Cys Ser His Ser Arg Arg Ile Ser Pro Thr Val Gln Gly Cys Val Ser
 20 25 30
 Gly Glu Arg Ala Leu Gly Ser Cys Gly Asn Gln Gly Pro Pro Ile Leu
 35 40 45
 Val Pro Val Ile Gly Cys Ile Pro Ser Ser Cys Leu Cys Leu Ser Trp
 50 55 60
 Pro Val Trp Ser Pro Cys Val His Leu Ser Pro Ser His Gly Leu Ser
 65 70 75 80
 Asn Trp Gly Phe Arg Leu Pro Met Arg Gly Ser Trp Tyr Val Arg
 85 90 95

<210> 3211
 <211> 1728
 <212> DNA
 <213> Homo sapiens

<400> 3211
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 tggacaaaag attccaagtc gatagcccag gccaaagaaa gcgcagggga caactccagt
 120
 gtttccttg ccctcgtgca agccagtccg aaggaccagg gactctatta ctgctgcac
 180
 aagaacagct acggaaaagt gactgctgaa tttaacctca cagctgaagt tctcaaacag
 240
 ctgtcaagtc acacagaata ctaaaggatg tgaagagatt gaattcagcc aactcatctt
 300
 caaagaagac ttcctccatg acagctactt tggggggccgc ctgcgtgggtc agatcgccac
 360
 ggaggagctg cactttggag aaggggttca ccgcaaagcc ttccgcagca cagtgatgca
 420

cggcctcatg cctgtcttca aacctggcca tgccgtgtgtg cttaaggtgc acaatgccat
 480
 tgcctatggg accagaaata atgatgagct catccaaagg aactacaaac tcgctgcccc
 540
 ggaatgctat gttcaaaata ctgccaggta ttatgccaaag atctacgctg ctgaagcaca
 600
 gcctctggaa ggctttggag aagtacctga gatcattcct atttttctta tccatcggcc
 660
 tgagaacaat atcccgtatg ctacagtgga ggaggagctg attggagaat ttgtgaagta
 720
 ttccatcagg gatgggaaag aaataaactt cttgagaaga gaatcagaag ctggtcagaa
 780
 atgttgacc ttccagcact ggggtgtacca gaaaacaagt ggctgcctcc tggtgacgga
 840
 catgcaaggt gtaggaatga agctaactga cgttggcata gcaacgctgg ctaaagggta
 900
 caagggattt aaaggcaact gttccatgac cttcattgat cagtttaaag cactacacca
 960
 gtgtaacaag tattgcaaaa tgctgggact gaaatccctt caaaacaaca accagaaaca
 1020
 gaagcagccg agcattggga aaagcaaagt tcaaacaac tctatgacag taaagaaggc
 1080
 agggcctgag accccaggcg aaaagaaaac ctaacgtccc cgggtaacct aatggccact
 1140
 ggctagcagc acacaatctc gccagggaaa atctgaggcc acacaggaga gaatatacag
 1200
 cctgcagaga gtgcgtggca atccttactc ccagccgact gtgcgccaag atgcttctaa
 1260
 acccatcacc tgctgtcttc actcaaata tttcagaaca ggatttgca ccagggttat
 1320
 ggggagattg aatcaacgat tgggtctcaa gacagtccat tctttatata catgtttagc
 1380
 atttttacca acctcacatc atgtgtatat ttgtgtattt gcacatgggt gtgctgtcga
 1440
 ggacctggtg ctgagaagag tctgttcaca gccaaaatc ttcccactgt cattcctaac
 1500
 ctgggatttc tagacacatc ctgctgtgat gtaaacagaa atcacgaatt cgctcactgg
 1560
 atcaagttgt tccactgggt tctaatacgc tattgttgcc ggagggtgggt tctgtgacgt
 1620
 gaagccattt cccatcattc aacagccagt tacaattttc tgtttaatta aattcatatt
 1680
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 1728

<210> 3212

<211> 87

<212> PRT

<213> Homo sapiens

<400> 3212

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1				5				10				15			
Ser	Thr	Val	Cys	Trp	Thr	Lys	Asp	Ser	Lys	Ser	Ile	Ala	Gln	Ala	Lys

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                20                25                30
Lys Ser Ala Gly Asp Asn Ser Ser Val Ser Leu Ala Ile Val Gln Ala
                35                40                45
Ser Pro Lys Asp Gln Gly Leu Tyr Tyr Cys Cys Ile Lys Asn Ser Tyr
                50                55                60
Gly Lys Val Thr Ala Glu Phe Asn Leu Thr Ala Glu Val Leu Lys Gln
65                70                75                80
Leu Ser Ser His Thr Glu Tyr
                85

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<210> 3213

<211> 348

<212> DNA

<213> Homo sapiens

<400> 3213

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acgcgtgaag gggaagcggc ggggtagtaa cagattatgg gcaacagtcc ttttaattaa
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tctaccgtca tcatggctaa tgaggactgt cccaaggctg ctgatagtcc tttttcatca
120
gataaacatg cccaactcat cttggcccaa atcaataaga tgagaaatgg acagcatttc
180
tgtgatgtgc agctgcaagt tggacaggaa agtttttaaag ctcacggct ggttttggt
240
gccagcagtc cttactttgc agctttgttc actggaggaa tgaaagagtc ctcaaaagat
300
gttgtagcga ttctaggaat tgaagcagga atctttcaga tactttcta
348

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<210> 3214

<211> 92

<212> PRT

<213> Homo sapiens

<400> 3214

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Met Ala Asn Glu Asp Cys Pro Lys Ala Ala Asp Ser Pro Phe Ser Ser
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Asp Lys His Ala Gln Leu Ile Leu Ala Gln Ile Asn Lys Met Arg Asn
                20                25                30
Gly Gln His Phe Cys Asp Val Gln Leu Gln Val Gly Gln Glu Ser Phe
                35                40                45
Lys Ala His Arg Leu Val Leu Ala Ala Ser Ser Pro Tyr Phe Ala Ala
50                55                60
Leu Phe Thr Gly Gly Met Lys Glu Ser Ser Lys Asp Val Val Pro Ile
65                70                75                80
Leu Gly Ile Glu Ala Gly Ile Phe Gln Ile Leu Leu
                85                90

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<210> 3215

<211> 597

<212> DNA

<213> Homo sapiens

<400> 3215

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 tgcaacactg gggacaagat ggtggagtgc cagctggaga cgcacaacca caagatgggtg
 120
 accttcaagt tcgacttgga cggggacgca cccgatgaaa ttgccacgta tatgggtggag
 180
 catgacttta tcctgcaggc cgagcgggaa acgttcatcg agcagatgaa ggatgtcatg
 240
 gacaaggcag aggacatgct cagcgaggac acagacgccg accgtggctc cgaccagggg
 300
 accagcccgc cacacctcag cacctgcggc ctgggcaccg gggaggagag ccgacaatcc
 360
 caagccaacg cccccgtgta tcagcagaac gtcctgcaca ccgggaagag gtggttcatc
 420
 atctgtccgg tgcttgagcc ccccgcccc gagggccctt gaattcttcgc cccacttcc
 480
 tctaagctcc ctgccgccag aagccagcca agattcagcg ccctataaag accagctgtc
 540
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 597

<210> 3216

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3216

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Ile	Leu	Asn	Val	Cys	Asn	Thr	Gly	Asp	Lys	Met	Val	Glu	Cys	Gln	Leu
			20					25					30		
Glu	Thr	His	Asn	His	Lys	Met	Val	Thr	Phe	Lys	Phe	Asp	Leu	Asp	Gly
		35					40					45			
Asp	Ala	Pro	Asp	Glu	Ile	Ala	Thr	Tyr	Met	Val	Glu	His	Asp	Phe	Ile
	50					55					60				
Leu	Gln	Ala	Glu	Arg	Glu	Thr	Phe	Ile	Glu	Gln	Met	Lys	Asp	Val	Met
65					70				75					80	
Asp	Lys	Ala	Glu	Asp	Met	Leu	Ser	Glu	Asp	Thr	Asp	Ala	Asp	Arg	Gly
			85						90					95	
Ser	Asp	Pro	Gly	Thr	Ser	Pro	Pro	His	Leu	Ser	Thr	Cys	Gly	Leu	Gly
		100						105					110		
Thr	Gly	Glu	Glu	Ser	Arg	Gln	Ser	Gln	Ala	Asn	Ala	Pro	Val	Tyr	Gln
	115					120						125			
Gln	Asn	Val	Leu	His	Thr	Gly	Lys	Arg	Trp	Phe	Ile	Ile	Cys	Pro	Val
	130					135					140				
Pro	Glu	Pro	Pro	Ala	Pro	Glu	Gly	Pro							
145					150										

<210> 3217

<211> 2570

<212> DNA

<213> Homo sapiens

<400> 3217

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gactttgtaa agctgcggga aatgctcatt tgtacaaata tggaggacct gcgagagcag
120
accataacca ggcactatga gctttacagg cgctgcaaac tggaggaaat gggctttaca
180
gatgtggggcc cagaaaacaa gccagtcagt gttcaagaga cctatgaagc caaaagacat
240
gagttccatg gtgaacgtca gaggaaggaa gaagaaatga aacagatggt tgtgcagcga
300
gtaaaggaga aagaagccat attgaaagaa gctgagagag agctacaggc caaatgtgag
360
caccttaaga gacttcacca agaagagaga atgaagcttg aagaacaaag aagacttttg
420
gaagaagaaa taattgcttt ctctaaaaag aaagctacct ccgagatatt tcacagccag
480
tcctttctgg caacaggcag caacctgagt aaggacaagg accataagaa ctccaatttt
540
ttgtaaaaca gaagtccag agcacagaag gtcacatca caagcaaact ttattaaaaa
600
aaaactagaa gtgtgctttg attttgctgt tatttgtttt atcacttcta tatttggtga
660
acagccacag ttactgatat ttatggaaaa gtactttcaa gtacaaggtc aatacataag
720
ccagagtga tgaactaca agttgagcat ctctaattca aaaatctgaa atccagaagc
780
ttcaaaatct gaatcttttt gagcactgac ttgacccac aagtggaaaa tccccaccc
840
gacacctttg ctttctgatg gttcagttta aacagatttt gtttcttgca caaaattttt
900
gtataaatta ctttcaggct atatgtataa ggtggatgtg aaacatgaat tatgtaatta
960
gagtcgggtc ccgttggtga tatgcagata ttccaaacct gaaatccaaa acacttctgg
1020
tccctagcat tttggataag ggatactcag cttgtacctata tatattcata tatattcact
1080
gttggttagaa atgtttaagt tgctgttctg tgatgaatct aaatcttttc tcttgctacc
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1200
gaacccatta atatcgtggc tatctgatta catttatatt ccaagatgaa ctttttttta
1260
tatatgctaa aaattttggg gaatatgttt tgggatgtat tatggagcta aaactctaac
1320
ctcttaatag ttttatagaa cttaaaaatt ttttatacaa ttaccaatt ggtgatatga
1380
tcttaagctt ttgtgtcaga ttatttaata tgatgacttc atgctttatt atgccttatt
1440
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1500
ataagctatt ttttcctaag gataaagtac ctttgagcat gagtgatca cagctttcat
1560
taggaaaact tttcattaca tacttgttta aactctgtct tccagggtaa aaataataag
1620

gttgaatcat tttattaaaa atacttttta agaaaataac tatgaacatc tgaatattaa
 1680
 agatataaaa atgcacataa ttcataatttc aggtgggtatt tgcattcagt gccttactgg
 1740
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 1800
 tcattttttg tacttgaata ttctaaataa aactgacatt tactcttgac aaataaaaaca
 1860
 tatattttact aaaaaaaaaa aaaaaaaacc tcgtgccgaa ttcggagagt ctaggaatac
 1920
 tgttaaagga aaaaaaagag gggggaagat caggtcatac tatctactct cctcatctct
 1980
 aacagctcag gatctcttag cattttaatt agatgtaatt gtttgtcttt aactgtcaaa
 2040
 aagtttgggt ctgtgtctgt gttttaataa gacgagagga cgagcgattg aggtgtatgg
 2100
 agagaaaaca gacctaatgc tccttggtcc tagagtagag tggagggagg gtggcctaag
 2160
 agttgagctc tcggaactgc atgctgctgg acagtatcac tgtctttcct agatggcagt
 2220
 cactgaattc cattttttca aggtaatttc ttgtgcctct aatagcccaa gaatgggagg
 2280
 ttgatcagat ctgacatgat tccttctgt tctgaactgt ggggtgtgca catctctgct
 2340
 tgagtcaggt ttgagtagag gcttagagac agttgggtga gaacaaccaa aatcttatca
 2400
 tggctcagt cataatcatt agggggaact ctagccaaat ggtttaactt ctgctgtgg
 2460
 aactggggat tgggtgggca ggaaaagggtg atatccattc tttctgataa ctagatgggtg
 2520
 ctgagaagct tttgaataaa aactttgcta aatgaaaaaa aaaaaaaaaa
 2570

<210> 3218

<211> 181

<212> PRT

<213> Homo sapiens

<400> 3218

Gly	Val	Lys	Ala	Arg	Gln	Tyr	Pro	Trp	Gly	Val	Val	Gln	Val	Glu	Asn
1				5					10					15	
Glu	Asn	His	Cys	Asp	Phe	Val	Lys	Leu	Arg	Glu	Met	Leu	Ile	Cys	Thr
			20					25					30		
Asn	Met	Glu	Asp	Leu	Arg	Glu	Gln	Thr	His	Thr	Arg	His	Tyr	Glu	Leu
		35					40					45			
Tyr	Arg	Arg	Cys	Lys	Leu	Glu	Glu	Met	Gly	Phe	Thr	Asp	Val	Gly	Pro
	50					55					60				
Glu	Asn	Lys	Pro	Val	Ser	Val	Gln	Glu	Thr	Tyr	Glu	Ala	Lys	Arg	His
	65				70				75					80	
Glu	Phe	His	Gly	Glu	Arg	Gln	Arg	Lys	Glu	Glu	Glu	Met	Lys	Gln	Met
			85					90						95	
Phe	Val	Gln	Arg	Val	Lys	Glu	Lys	Glu	Ala	Ile	Leu	Lys	Glu	Ala	Glu
			100					105					110		
Arg	Glu	Leu	Gln	Ala	Lys	Phe	Glu	His	Leu	Lys	Arg	Leu	His	Gln	Glu

	115		120		125										
Glu	Arg	Met	Lys	Leu	Glu	Glu	Gln	Arg	Arg	Leu	Leu	Glu	Glu	Glu	Ile
	130				135						140				
Ile	Ala	Phe	Ser	Lys	Lys	Lys	Ala	Thr	Ser	Glu	Ile	Phe	His	Ser	Gln
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Ser	Phe	Leu	Ala	Thr	Gly	Ser	Asn	Leu	Ser	Lys	Asp	Lys	Asp	His	Lys
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<210> 3219

<211> 1241

<212> DNA

<213> Homo sapiens

<400> 3219

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1140

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<210> 3220
 <211> 413
 <212> PRT
 <213> Homo sapiens

<400> 3220

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			20					25					30		
Val	Asn	Gly	Gly	Xaa	Val	Thr	Ser	Glu	Arg	Glu	Thr	Asp	Ile	Leu	Asp
		35					40					45			
Asp	Glu	Leu	Pro	Asn	Gln	Asp	Gly	His	Ser	Ala	Gly	Ser	Met	Gly	Thr
	50					55					60				
Leu	Ser	Ser	Leu	Asp	Gly	Val	Thr	Asn	Ile	Ser	Glu	Gly	Gly	Tyr	Pro
65					70					75					80
Glu	Ala	Leu	Ser	Pro	Leu	Thr	Asn	Gly	Leu	Asp	Lys	Ser	Tyr	Pro	Met
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Glu	Pro	Met	Val	Asn	Gly	Gly	Gly	Tyr	Pro	Tyr	Glu	Ser	Ala	Ser	Arg
			100					105						110	
Ala	Gly	Pro	Ala	His	Ala	Gly	His	Thr	Ala	Pro	Met	Arg	Pro	Ser	Tyr
	115						120					125			
Ser	Ala	Gln	Glu	Gly	Leu	Ala	Gly	Tyr	Gln	Arg	Glu	Gly	Pro	His	Pro
	130					135					140				
Ala	Trp	Pro	Gln	Pro	Val	Thr	Thr	Ser	His	Tyr	Ala	His	Asp	Pro	Ser
145					150					155					160
Gly	Met	Phe	Arg	Ser	Gln	Ser	Phe	Ser	Glu	Ala	Glu	Pro	Gln	Leu	Pro
			165						170					175	
Pro	Ala	Pro	Val	Arg	Gly	Gly	Ser	Ser	Arg	Glu	Ala	Val	Gln	Arg	Gly
			180					185					190		
Leu	Asn	Ser	Trp	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Pro	Arg	Pro
	195						200						205		
Pro	Pro	Arg	Gln	Gln	Glu	Arg	Ala	His	Leu	Glu	Ser	Leu	Val	Ala	Ser
	210					215						220			
Arg	Pro	Ser	Pro	Gln	Pro	Leu	Ala	Glu	Thr	Pro	Ile	Pro	Ser	Leu	Pro
225					230					235					240
Glu	Phe	Pro	Arg	Ala	Ala	Ser	Gln	Gln	Glu	Ile	Glu	Gln	Ser	Ile	Glu
			245						250					255	
Thr	Leu	Asn	Met	Leu	Met	Leu	Asp	Leu	Glu	Pro	Ala	Ser	Ala	Ala	Ala
			260					265					270		
Pro	Leu	His	Lys	Ser	Gln	Ser	Val	Pro	Gly	Ala	Trp	Pro	Gly	Ala	Ser
	275						280						285		
Pro	Leu	Ser	Ser	Gln	Pro	Leu	Ser	Gly	Ser	Ser	Arg	Gln	Ser	His	Pro
	290					295					300				
Leu	Thr	Gln	Ser	Arg	Ser	Gly	Tyr	Ile	Pro	Ser	Gly	His	Ser	Leu	Gly
305					310					315					320
Thr	Pro	Glu	Pro	Ala	Pro	Arg	Ala	Ser	Leu	Glu	Ser	Val	Pro	Pro	Gly
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1140

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<210> 3222

<211> 331

<212> PRT

<213> Homo sapiens

<400> 3222

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Trp	Val	Glu	Glu	Pro	Gln	Arg	Ser	Cys	Thr	Ala	Arg	Arg	Trp	His	Ile
			20					25					30		
Gln	Ala	Thr	Gly	Gly	Val	Glu	Pro	Ala	Gly	Trp	Lys	Glu	Met	Arg	Cys
			35				40					45			
His	Leu	Arg	Ala	Asn	Gly	Tyr	Leu	Cys	Lys	Tyr	Gln	Phe	Glu	Val	Leu
	50					55					60				
Cys	Pro	Ala	Pro	Arg	Pro	Gly	Ala	Ala	Ser	Asn	Leu	Ser	Tyr	Arg	Ala
65				70						75				80	
Pro	Phe	Gln	Leu	His	Ser	Ala	Ala	Leu	Asp	Phe	Ser	Pro	Pro	Gly	Thr
				85					90					95	
Glu	Val	Ser	Ala	Leu	Cys	Arg	Gly	Gln	Leu	Pro	Ile	Ser	Val	Thr	Cys
			100					105					110		
Ile	Ala	Asp	Glu	Ile	Gly	Ala	Arg	Trp	Asp	Lys	Leu	Ser	Gly	Asp	Val
		115					120						125		
Leu	Cys	Pro	Cys	Pro	Gly	Arg	Tyr	Leu	Arg	Ala	Gly	Lys	Cys	Ala	Glu
	130					135						140			
Leu	Pro	Asn	Cys	Leu	Asp	Asp	Leu	Gly	Gly	Phe	Ala	Cys	Glu	Cys	Ala
145				150						155					160
Thr	Gly	Phe	Glu	Leu	Gly	Lys	Asp	Gly	Arg	Ser	Cys	Val	Thr	Ser	Gly
				165					170					175	
Glu	Gly	Gln	Pro	Thr	Leu	Gly	Gly	Thr	Gly	Val	Pro	Thr	Arg	Arg	Pro
			180					185					190		
Pro	Ala	Thr	Ala	Thr	Ser	Pro	Val	Pro	Gln	Arg	Thr	Trp	Pro	Ile	Arg
		195					200					205			
Val	Asp	Glu	Lys	Leu	Gly	Glu	Thr	Pro	Leu	Val	Pro	Glu	Gln	Asp	Asn
	210					215					220				
Ser	Val	Thr	Ser	Ile	Pro	Glu	Ile	Pro	Arg	Trp	Gly	Ser	Gln	Ser	Thr
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<210> 3224

<211> 224
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Val Ile Pro Gly Ala Glu Pro Leu Ile Cys Ala Ser Ser Leu Leu Ala
 50 55 60
 Thr Ala Pro Cys Leu Tyr Leu Ala Leu Val Leu Ala Pro Thr Thr Leu
 65 70 75 80
 Leu Ala Ser Tyr Val Phe Leu Gly Leu Gly Glu Leu Leu Leu Ser Cys
 85 90 95
 Asn Trp Ala Val Val Ala Asp Ile Leu Leu Ser Val Val Val Pro Arg
 100 105 110
 Cys Arg Gly Thr Ala Glu Ala Leu Gln Ile Thr Val Gly His Ile Leu
 115 120 125
 Gly Asp Ala Gly Ser Pro Tyr Leu Thr Gly Leu Ile Ser Ser Val Leu
 130 135 140
 Arg Pro Gly Ala Leu Thr Pro Leu Gln Arg Phe Arg Ser Leu Gln Gln
 145 150 155 160
 Ser Phe Leu Cys Cys Ala Phe Val Ile Ala Leu Gly Gly Gly Cys Phe
 165 170 175
 Leu Leu Thr Ala Leu Tyr Leu Glu Arg Asp Glu Thr Arg Ala Trp Gln
 180 185 190
 Pro Val Thr Gly Thr Pro Asp Ser Asn Asp Val Asp Ser Asn Asp Leu
 195 200 205
 Glu Arg Gln Gly Leu Leu Ser Gly Ala Gly Ala Ser Thr Glu Glu Pro
 210 215 220

<210> 3225
 <211> 506
 <212> DNA
 <213> Homo sapiens

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 300
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 360
 accacaccgc ctttgaggtg agccacccaa gatgcaggtg gggctgtatg aaactccacg
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<210> 3226
<211> 137
<212> PRT
<213> Homo sapiens

<400> 3226
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Leu Arg Pro Cys Thr Phe Phe Ile Gln Glu Ala Thr Lys Asn Ser Ala
20 25 30
Cys Phe Pro Val Pro Lys Met Pro Val Pro Cys Ala Leu Gly Glu Glu
35 40 45
Leu Val Pro Cys His Arg Gly Thr Gly Pro Ala Val Val Trp Pro Ala
50 55 60
Gln Pro Gln Gln Gly Glu Val Glu Pro Gln Pro Gln Pro Thr Gln Arg
65 70 75 80
Met Glu Pro Pro Ser Ala Ala Lys Asn Asn His Thr Ala Phe Glu Val
85 90 95
Ser His Pro Arg Cys Arg Trp Gly Cys Met Lys Leu His Glu His Gly
100 105 110
Met Ser Phe Ile Phe Arg Val Pro Arg Gly His Glu Trp Tyr Gln Asp
115 120 125
Pro Trp Arg Cys Pro Trp Phe Pro Met
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<210> 3227
<211> 1623
<212> DNA
<213> Homo sapiens

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180
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240
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<210> 3228

<211> 385

<212> PRT

<213> Homo sapiens

<400> 3228

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			20					25					30		
Val	Gln	Val	Gly	Asp	Ser	Leu	Arg	Ala	Ser	Thr	Ile	Arg	Lys	Val	Gln
		35					40					45			
Thr	Glu	Ser	Ser	Thr	Gly	Ser	Val	Gly	Ser	Asn	Arg	Val	Arg	Thr	Thr
	50					55				60					
Leu	Thr	Leu	Cys	Val	Glu	Ala	Ile	Asp	Phe	Asp	Ser	Gln	Ala	Cys	Gln

65					70					75				80	
Leu	Arg	Val	Lys	Gly	Thr	Asn	Ile	Gln	Glu	Asn	Glu	Tyr	Val	Lys	Met
				85					90					95	
Gly	Ala	Tyr	His	Thr	Ile	Glu	Leu	Glu	Pro	Asn	Arg	Gln	Phe	Thr	Leu
			100					105					110		
Ala	Lys	Lys	Gln	Trp	Asp	Ser	Val	Val	Leu	Glu	Arg	Ile	Glu	Gln	Ala
		115					120					125			
Cys	Asp	Pro	Ala	Trp	Ser	Ala	Asp	Val	Ala	Ala	Val	Val	Met	Gln	Glu
	130					135					140				
Gly	Leu	Ala	His	Ile	Cys	Leu	Val	Thr	Pro	Ser	Met	Thr	Leu	Thr	Arg
145					150					155					160
Ala	Lys	Val	Glu	Val	Asn	Ile	Pro	Arg	Lys	Arg	Lys	Gly	Asn	Cys	Ser
			165					170					175		
Gln	His	Asp	Arg	Ala	Leu	Glu	Arg	Phe	Tyr	Glu	Gln	Val	Val	Gln	Ala
		180						185					190		
Ile	Gln	Arg	His	Ile	His	Phe	Asp	Val	Val	Lys	Cys	Ile	Leu	Val	Ala
		195					200					205			
Ser	Pro	Gly	Phe	Val	Arg	Glu	Gln	Phe	Cys	Asp	Tyr	Met	Phe	Gln	Gln
	210					215					220				
Ala	Val	Lys	Thr	Asp	Asn	Lys	Leu	Leu	Leu	Glu	Asn	Arg	Ser	Lys	Phe
225					230					235					240
Leu	Gln	Val	His	Ala	Ser	Ser	Gly	His	Lys	Tyr	Ser	Leu	Lys	Glu	Ala
			245					250					255		
Leu	Cys	Asp	Pro	Thr	Val	Ala	Ser	Arg	Leu	Ser	Asp	Thr	Lys	Ala	Ala
		260						265					270		
Gly	Glu	Val	Lys	Ala	Leu	Asp	Asp	Phe	Tyr	Lys	Met	Leu	Gln	His	Glu
		275				280						285			
Pro	Asp	Arg	Ala	Phe	Tyr	Gly	Leu	Lys	Gln	Val	Glu	Lys	Ala	Asn	Glu
	290					295					300				
Ala	Met	Ala	Ile	Asp	Thr	Leu	Leu	Ile	Ser	Asp	Glu	Leu	Phe	Arg	His
305				310					315						320
Gln	Asp	Val	Ala	Thr	Arg	Ser	Arg	Tyr	Val	Arg	Leu	Val	Asp	Ser	Val
			325					330					335		
Lys	Glu	Asn	Ala	Gly	Thr	Val	Arg	Ile	Phe	Ser	Ser	Leu	His	Val	Ser
			340					345					350		
Gly	Glu	Gln	Leu	Ser	Gln	Leu	Thr	Gly	Val	Ala	Ala	Ile	Leu	Arg	Phe
		355				360						365			
Pro	Val	Pro	Glu	Leu	Ser	Asp	Gln	Glu	Gly	Asp	Ser	Ser	Ser	Glu	Glu
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Asp
385

<210> 3229

<211> 1008

<212> DNA

<213> Homo sapiens

<400> 3229

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 720
 tacgctgtgt ataatgaaga tacatccatg atagaaaaac ttctttcaca tggtagaaat
 780
 attgaagaat gcagcaagaa tgaatatcag ccactgttac ttgctgtgag tcgaagaaaa
 840
 gtgaaaatgg tggaaatttt attaaagaaa aaagcaaatg taaatgccat tgattatctt
 900
 ggcagatcag ccttcatact tgctgttact cttggagaaa aagatatagt cattcttctt
 960
 ctgcagcaca atattgatgt gttttctcga gatgtgtatg gaaagctt
 1008

<210> 3230

<211> 232

<212> PRT

<213> Homo sapiens

<400> 3230

Met	Glu	Asp	Gly	Lys	Arg	Glu	Arg	Trp	Pro	Thr	Leu	Met	Glu	Arg	Leu
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Cys	Ser	Asp	Gly	Phe	Ala	Phe	Pro	Gln	Tyr	Pro	Ile	Lys	Pro	Tyr	His
			20					25					30		
Leu	Lys	Arg	Ile	His	Arg	Ala	Val	Leu	Arg	Gly	Asn	Leu	Glu	Glu	Leu
			35				40					45			
Lys	Tyr	Leu	Leu	Leu	Thr	Tyr	Tyr	Asp	Ile	Asn	Lys	Arg	Asp	Arg	Lys
			50				55				60				
Glu	Arg	Thr	Ala	Leu	His	Leu	Ala	Cys	Ala	Thr	Gly	Gln	Pro	Glu	Met
65					70					75					80
Val	His	Leu	Leu	Val	Ser	Arg	Arg	Cys	Glu	Leu	Asn	Leu	Cys	Asp	Arg
				85				90						95	
Glu	Asp	Arg	Thr	Pro	Leu	Ile	Lys	Ala	Val	Gln	Leu	Arg	Gln	Glu	Ala
			100					105					110		
Cys	Ala	Thr	Leu	Leu	Leu	Gln	Asn	Gly	Ala	Asp	Pro	Asn	Ile	Thr	Asp
			115				120					125			
Val	Phe	Gly	Arg	Thr	Ala	Leu	His	Tyr	Ala	Val	Tyr	Asn	Glu	Asp	Thr
			130				135					140			
Ser	Met	Ile	Glu	Lys	Leu	Leu	Ser	His	Gly	Thr	Asn	Ile	Glu	Glu	Cys

145 150 155 160
 Ser Lys Asn Glu Tyr Gln Pro Leu Leu Leu Ala Val Ser Arg Arg Lys
 165 170 175
 Val Lys Met Val Glu Phe Leu Leu Lys Lys Lys Ala Asn Val Asn Ala
 180 185 190
 Ile Asp Tyr Leu Gly Arg Ser Ala Leu Ile Leu Ala Val Thr Leu Gly
 195 200 205
 Glu Lys Asp Ile Val Ile Leu Leu Leu Gln His Asn Ile Asp Val Phe
 210 215 220
 Ser Arg Asp Val Tyr Gly Lys Leu
 225 230

<210> 3231

<211> 1367

<212> DNA

<213> Homo sapiens

<400> 3231

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 120
 taacagtcgc ggagccggcc gcgtcgtgag ggggtcggca cggggagtcg ggcggtcttg
 180
 tgcattcttg ctacctgtgg gtcgaagatg tcggacatcg gagactgggt caggagcatc
 240
 ccggcgatca cgcgctattg gttcgccgcc accgtcgccg tgcccttggt cggcaaactc
 300
 ggctcatca gcccgcccta cctcttcctc tggcccgaag ccttccttta tcgctttcag
 360
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 420
 tatttggtca atttatattt cttatatcag tattctacgc gacttgaaac aggagctttt
 480
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 540
 actggcttag caatggatat gcagttgctg atgattcctc tgatcatgtc agtactttat
 600
 gtctggggcc agctgaacag agacatgatt gtatcatttt ggtttggaac acgatttaag
 660
 gcctgctatt taccctgggt tatecttgga ttcaactata tcatcggagg ctcggtaatc
 720
 aatgagctta ttggaaatct ggttgacat ctttattttt tctaattgtt cagataccca
 780
 atggacttgg gaggaagaaa ttttctatcc acacctcagt ttttgtagcg ctggctgccc
 840
 agtaggagag gaggagtatc aggatttgggt gtgccccctg ctagcatgag gcgagctgct
 900
 gatcagaatg gcggaggcgg gagacacaac tggggccagg gctttcgact tggagaccag
 960
 tgaaggggcg gcctcgggca gccgctcctc tcaagccaca tttctctcca gtgctgggtg
 1020
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<210> 3232
<211> 251
<212> PRT
<213> Homo sapiens
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<210> 3233
<211> 975
<212> DNA
<213> Homo sapiens
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<400> 3233

nacgcgtacg tgggtggagct ctgcgtgttt actatTTTTg gaaatgaaga aaatggaaaag
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 120
 atgacaattt tcacatctcc cgcttcccc tccaaagagt tctacttgtc caattctgaa
 180
 aaggaacgtt atgaaaaaga attcagccaa gaaagacaac aagaaatttt gagaagagca
 240
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 300
 tgtcagctga ttaaacctga tcgggcgcac cactgtctcag cctgtgactc atgtattctt
 360
 aagatggatc atccctgtcc ttgggtgaat aactgtgtgg gattttctaa ttacaaattc
 420
 ttctgtctgt ttttattgta ttccctatta tattgccttt tcgtggccgc acagtttttag
 480
 agtacttaaa aaattttgga cgaaagaacc gacccaaaacc cgggccaaaa ttccacgtac
 540
 ttttttcttt tctttgtgtc tgcaatgttc ttcacagcg tcctctcact tttcagctac
 600
 cactgtctggc tttaaacagc attgtccaca gtcctgtctg cagggtcagg gcatggcctc
 660
 tctccgtgtt cctgtgaaga gccttcattg gaatcatccc gggacataca gcttgaatgt
 720
 gctgtctggc tagccctctc acaagtcggt cactctgcac aaggaatccg agagctcatc
 780
 aaggatcagc acggtctggg gccaggtgg ggtggaacac gcacggtcca caagcaattc
 840
 tgtctttctc aaggcttttt cttgtgcagt atgaaatcct tcatatttca tatgaagtat
 900
 gtgccttctg gggcactgag ctcaggaact ccaaaaagac cccttcgggc cggatcccg
 960
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 975

<210> 3234

<211> 159

<212> PRT

<213> Homo sapiens

<400> 3234

Xaa	Ala	Tyr	Val	Val	Glu	Leu	Cys	Val	Phe	Thr	Ile	Phe	Gly	Asn	Glu
1				5					10					15	
Glu	Asn	Gly	Lys	Thr	Val	Val	Tyr	Leu	Val	Ala	Phe	His	Leu	Phe	Phe
			20					25					30		
Val	Met	Phe	Val	Trp	Ser	Tyr	Trp	Met	Thr	Ile	Phe	Thr	Ser	Pro	Ala
		35					40					45			
Ser	Pro	Ser	Lys	Glu	Phe	Tyr	Leu	Ser	Asn	Ser	Glu	Lys	Glu	Arg	Tyr
	50					55					60				
Glu	Lys	Glu	Phe	Ser	Gln	Glu	Arg	Gln	Gln	Glu	Ile	Leu	Arg	Arg	Ala
65					70					75				80	
Ala	Arg	Ala	Leu	Pro	Ile	Tyr	Thr	Thr	Ser	Ala	Ser	Lys	Thr	Ile	Arg


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<400> 3237
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120
gatgaggacc gttgggaagt acggggggac cgcaaggccc ggaagcccct ggtggagaag
180
aagcgacgcg cgcggatcaa cgagagtctt caggagtgc ggctgctgct ggcgggcgc
240
gaggtgcagg ccaagctgga gaacgccgaa gtgctggagc tgacggtgcg gcgggtccag
300
ggtgtgctgc ggggcccggc gcgcgagcgc gagcagctgc aggcggaagc gagcgagcgc
360
ttcgtgccg gctacatcca gtgcatgcac gaggtgcaca cgttcgtgtc cacgtgccag
420
gccatcgacg ctaccgtcgc tgccgagctc ctgaaccatc tgctcgagtc catgccgctg
480
cgtgagggca gcagcttcca ggatctgctg ggggacgccc tggcggggcc acctagagcc
540
cctggacgga gtggctggcc tgcggggggc gctccgggat cccaataacc cagccccccg
600
ggtcctgggg acgacctgtg ctccgacctg gaggaggccc ctgaggctga actgagtcag
660
gctcctgctg aggggcccga cttgggtgccc gcagccctgg gcagcctgac cacagcccaa
720
attgcccgga gtgtctggag gccttgggtga ccaatgccag ccagagtcct gcgggggtgg
780
gcccggccct ccctggatct cctccctcct ccagggggtt cagatgtggg ggggtagggc
840
cctggaagtc tcccaggtct tccctccctc ctctgatgga tggcttgacg ggcagcccct
900
ggtaaccagc ccagtcaggc ccagccccg tttcttaaga aacttttagg gaccctgcag
960
ctctggagtg ggtggagggga gggagctacg ggcaggagga agaattttgt agagctgcc
1020

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gcgctctccc aggttcaccc acccaggctt caccagccct gtgcgggctc tgggggcaga
 1080
 ggtggcagaa atggtgctgg gcactagtgt tccaggcagc cctgggctaa aaaaaagctt
 1140
 gaacttgcca cttcagcggg gagatgagag gcagggtgcac tcagctgcac tgcccagagc
 1200
 tgtgatgctc tgtacatctt gttttagca cacttgagtt tgtgtattcc attgacatca
 1260
 aatgtgacaa ttttactaaa taaagaattt tggagttagt tacccttgaa aaaaaagtcg
 1320
 acg
 1323

<210> 3238

<211> 249

<212> PRT

<213> Homo sapiens

<400> 3238

Xaa	Leu	Gly	Cys	Asp	Leu	Pro	Arg	Arg	Gly	Val	Cys	Thr	Lys	Ala	Leu
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Gly	Ala	Gly	Leu	Arg	Ala	Leu	Trp	Thr	Met	Ala	Pro	Pro	Ala	Ala	Pro
			20					25					30		
Gly	Arg	Asp	Arg	Val	Gly	Arg	Glu	Asp	Glu	Asp	Arg	Trp	Glu	Val	Arg
		35					40					45			
Gly	Asp	Arg	Lys	Ala	Arg	Lys	Pro	Leu	Val	Glu	Lys	Lys	Arg	Arg	Ala
	50					55					60				
Arg	Ile	Asn	Glu	Ser	Leu	Gln	Glu	Leu	Arg	Leu	Leu	Leu	Ala	Gly	Ala
65					70				75					80	
Glu	Val	Gln	Ala	Lys	Leu	Glu	Asn	Ala	Glu	Val	Leu	Glu	Leu	Thr	Val
				85					90					95	
Arg	Arg	Val	Gln	Gly	Val	Leu	Arg	Gly	Arg	Ala	Arg	Glu	Arg	Glu	Gln
			100					105					110		
Leu	Gln	Ala	Glu	Ala	Ser	Glu	Arg	Phe	Ala	Ala	Gly	Tyr	Ile	Gln	Cys
		115					120					125			
Met	His	Glu	Val	His	Thr	Phe	Val	Ser	Thr	Cys	Gln	Ala	Ile	Asp	Ala
	130					135					140				
Thr	Val	Ala	Ala	Glu	Leu	Leu	Asn	His	Leu	Leu	Glu	Ser	Met	Pro	Leu
145					150					155				160	
Arg	Glu	Gly	Ser	Ser	Phe	Gln	Asp	Leu	Leu	Gly	Asp	Ala	Leu	Ala	Gly
				165				170						175	
Pro	Pro	Arg	Ala	Pro	Gly	Arg	Ser	Gly	Trp	Pro	Ala	Gly	Gly	Ala	Pro
			180					185					190		
Gly	Ser	Pro	Ile	Pro	Ser	Pro	Pro	Gly	Pro	Gly	Asp	Asp	Leu	Cys	Ser
		195					200					205			
Asp	Leu	Glu	Glu	Ala	Pro	Glu	Ala	Glu	Leu	Ser	Gln	Ala	Pro	Ala	Glu
	210					215					220				
Gly	Pro	Asp	Leu	Val	Pro	Ala	Ala	Leu	Gly	Ser	Leu	Thr	Thr	Ala	Gln
225					230					235				240	
Ile	Ala	Arg	Ser	Val	Trp	Arg	Pro	Trp							
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<210> 3239

<211> 432

<212> DNA

<213> Homo sapiens

<400> 3239

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aaaaccaaaag attctcctgg agttttctct aaactgggtg ttctcctgag gagagtgaca
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120
ggtttggtcc tccttttctt cgttctgcgg gtccgaagca atgtgctaaa gggtgctatc
180
caggaccgcg taggtctcct ttaccagttt gtgggcgcca ccccgtaac accgatgctg
240
aacgctgtga atctgtttcc cgtgctgcga gctgtcagcg accaggagag tcaggacggc
300
ctctaccaga agtggcagat gatgctggcc tatgcaactgc acgtcctccc cttcagcggt
360
gttgccacca tgattttcag cagtgtgtgc tactggacgc tgggcttaca tcctgaggtt
420
gcccgattgg gt
432

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<210> 3240

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3240

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Lys Thr Lys Asp Ser Pro Gly Val Phe Ser Lys Leu Gly Val Leu Leu
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Arg Arg Val Thr Arg Asn Leu Val Arg Asn Lys Leu Ala Val Ile Thr
      20           25           30
Arg Leu Leu Gln Asn Leu Ile Met Gly Leu Phe Leu Leu Phe Phe Val
      35           40           45
Leu Arg Val Arg Ser Asn Val Leu Lys Gly Ala Ile Gln Asp Arg Val
      50           55           60
Gly Leu Leu Tyr Gln Phe Val Gly Ala Thr Pro Tyr Thr Gly Met Leu
      65           70           75           80
Asn Ala Val Asn Leu Phe Pro Val Leu Arg Ala Val Ser Asp Gln Glu
      85           90           95
Ser Gln Asp Gly Leu Tyr Gln Lys Trp Gln Met Met Leu Ala Tyr Ala
      100          105          110
Leu His Val Leu Pro Phe Ser Val Val Ala Thr Met Ile Phe Ser Ser
      115          120          125
Val Cys Tyr Trp Thr Leu Gly Leu His Pro Glu Val Ala Arg Leu Gly
      130          135          140

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<210> 3241

<211> 492

<212> DNA

<213> Homo sapiens

<400> 3241

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acgaaataca aaataagagg caggaagagc ccaaagcatc agaaatgtgc cagttataat
 120
 gggccaaaat cccctcttgt gtctccagaa gtatttgaaa aatacgttag gatctgcctc
 180
 acagacatgc tcccaggaca ctgcacagca aggaggtacg gcgggcccag ccagccaagg
 240
 cagaggagga catcactgcc acagcagggg gcctgactgg cagcaaaagg gacgactccg
 300
 gcgaaaagtc agcaggaaac aggacagggg ctggaccaat ggctccctc agccccacac
 360
 cccaccagg caggagcggg gcctggcccg gggcaggcgg gtgggagagc tctctgagt
 420
 ggcagcaggg catggccctt gatgctgcag gtaccaggc tgcagctgca gaaacctcag
 480
 tgggaacca gg
 492

<210> 3242

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3242

Met	Gly	Gln	Asn	Pro	Leu	Leu	Cys	Leu	Gln	Lys	Tyr	Leu	Lys	Asn	Thr
1				5				10					15		
Leu	Gly	Ser	Ala	Ser	Gln	Thr	Cys	Ser	Gln	Asp	Thr	Arg	Gln	Gln	Gly
			20					25					30		
Gly	Thr	Ala	Gly	Pro	Ala	Ser	Gln	Gly	Arg	Gly	Gly	His	His	Cys	His
		35					40					45			
Ser	Arg	Gly	Pro	Asp	Trp	Gln	Gln	Lys	Gly	Arg	Leu	Arg	Arg	Lys	Val
	50					55					60				
Ser	Arg	Lys	Gln	Asp	Arg	Gly	Trp	Thr	Asn	Gly	Leu	Pro	Gln	Pro	His
65					70					75				80	
Thr	Pro	Pro	Arg	Gln	Glu	Arg	Cys	Leu	Ala	Arg	Gly	Arg	Arg	Val	Gly
			85					90						95	
Glu	Leu	Thr	Glu	Trp	Ala	Ala	Gly	His	Gly	Pro					
			100					105							

<210> 3243

<211> 944

<212> DNA

<213> Homo sapiens

<400> 3243

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 120
 tttgaggcaa aggtaaccca gaatctccca atgaaagaag gctgcacaga ggtctctctc
 180
 cttcgagttg ggtggtctgt tgatttttcc cgtccacagc ttggtgaaga tgaattctct
 240
 tacggtttcg atggacgagg actcaaggca gaaaatggac aatttgagga atttggccag
 300

acttttgggg agaatgatgt tattggctgc tttgctaatt ttgagactga agaagtagaa
 360
 ctttccttct ccaagaatgg agaagacctt ggtgtggcat tctggatcag caaggattcc
 420
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 480
 ttcggtcaga aggaggagcc cttcttccca ccaccagaag agtttgtgtt cattcatgct
 540
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 gtgattctga tgggtgggact acccggtatct ggaaagacct agtgggcact gaaatatgca
 660
 aaagaaaacc ctgagaaaag atacaatgtc ctgggagctg agactgtgct caatcaaagt
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 780
 caagcctccc agtgccttag taagctgggc cagattgctt cccggacaaa gaggaacttt
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 attcttgatc agtgtaatgt gtacaattct ggccaacggc ggaagctatt gctgttcaag
 900
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 944

<210> 3244

<211> 314

<212> PRT

<213> Homo sapiens

<400> 3244

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Phe	Ser	Glu	Lys	Phe	Pro	Thr	Leu	Trp	Ser	Gly	Ala	Arg	Ser	Thr	Tyr
			20					25					30		
Gly	Val	Thr	Lys	Gly	Lys	Val	Cys	Phe	Glu	Ala	Lys	Val	Thr	Gln	Asn
			35				40					45			
Leu	Pro	Met	Lys	Glu	Gly	Cys	Thr	Glu	Val	Ser	Leu	Leu	Arg	Val	Gly
	50					55					60				
Trp	Ser	Val	Asp	Phe	Ser	Arg	Pro	Gln	Leu	Gly	Glu	Asp	Glu	Phe	Ser
65					70					75				80	
Tyr	Gly	Phe	Asp	Gly	Arg	Gly	Leu	Lys	Ala	Glu	Asn	Gly	Gln	Phe	Glu
				85					90					95	
Glu	Phe	Gly	Gln	Thr	Phe	Gly	Glu	Asn	Asp	Val	Ile	Gly	Cys	Phe	Ala
			100					105					110		
Asn	Phe	Glu	Thr	Glu	Glu	Val	Glu	Leu	Ser	Phe	Ser	Lys	Asn	Gly	Glu
			115				120					125			
Asp	Leu	Gly	Val	Ala	Phe	Trp	Ile	Ser	Lys	Asp	Ser	Leu	Ala	Asp	Arg
	130					135					140				
Ala	Leu	Leu	Pro	His	Val	Leu	Cys	Lys	Asn	Cys	Val	Val	Glu	Leu	Asn
145					150					155				160	
Phe	Gly	Gln	Lys	Glu	Pro	Phe	Phe	Pro	Pro	Pro	Glu	Glu	Phe	Val	
			165					170					175		
Phe	Ile	His	Ala	Val	Pro	Val	Glu	Glu	Arg	Val	Arg	Thr	Ala	Val	Pro
			180					185					190		
Pro	Lys	Thr	Ile	Glu	Glu	Cys	Glu	Val	Ile	Leu	Met	Val	Gly	Leu	Pro

	195						200						205						
Gly	Ser	Gly	Lys	Thr	Gln	Trp	Ala	Leu	Lys	Tyr	Ala	Lys	Glu	Asn	Pro				
	210						215					220							
Glu	Lys	Arg	Tyr	Asn	Val	Leu	Gly	Ala	Glu	Thr	Val	Leu	Asn	Gln	Met				
225					230					235					240				
Arg	Met	Lys	Gly	Leu	Glu	Glu	Pro	Glu	Met	Asp	Pro	Lys	Ser	Arg	Asp				
			245						250					255					
Leu	Leu	Val	Gln	Gln	Ala	Ser	Gln	Cys	Leu	Ser	Lys	Leu	Val	Gln	Ile				
		260					265					270							
Ala	Ser	Arg	Thr	Lys	Arg	Asn	Phe	Ile	Leu	Asp	Gln	Cys	Asn	Val	Tyr				
	275					280					285								
Asn	Ser	Gly	Gln	Arg	Arg	Lys	Leu	Leu	Leu	Phe	Lys	Thr	Phe	Ser	Arg				
	290					295					300								
Lys	Val	Val	Val	Val	Val	Pro	Asn	Glu	Glu										
305					310														

<210> 3245

<211> 980

<212> DNA

<213> Homo sapiens

<400> 3245

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 120
 ccaaccacgc agggcctctg agagacaagg tacatcccat gattctagca caggaagaag
 180
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 300
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 360
 cggaccgttt attgtacaga tgtcgggtgca gatcttttgt ccatgtgcca gcgaaacatt
 420
 gccctcaaca gccacctggc tgccactgga ggtggtatag ttaggggtcaa agaactggac
 480
 tggctgaagg acgacctctg cacagatccc aaggccccct tcagttgggtc acaagaggaa
 540
 atttctgacc tgtacgatca caccaccatc ctgtttgcag ccgaagtgtt ttacgacgac
 600
 gacttgactg atgctgtggt taaaacgctc tcccgactcg cccacagatt gaaaaatgcc
 660
 tgcacagcca tactgtcggg ggagaagagg ctcaacttca cactgagaca cttggacgtc
 720
 acatgtgaag cctacgatca cttccgctcc tgcttgcacg cgctggagca gctcacagat
 780
 ggcaagctgc gcttcgtggg ggagcccgtg gaggcctcct tcccacagct cctggtttac
 840
 gagcgctcc agcagctgga gctctggaag atcatcgag aaccagtaac atgacccatc
 900
 gctccacca ggcgcggcgt ctcgactggt cttagagtgt atttctagta aaatcagaag
 960

ctcaccaaaag caaaaaaaaaa
980

<210> 3246

<211> 219

<212> PRT

<213> Homo sapiens

<400> 3246

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Val Trp Arg Gly Ala Leu Leu Leu Ala Asp Tyr Ile Leu Phe Arg Gln
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 20           25           30
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<400> 3247

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<213> Homo sapiens

<400> 3250

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<212> DNA

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2160
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2220
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2280
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2340
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2400
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2460
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2595

<210> 3252
 <211> 254
 <212> PRT
 <213> Homo sapiens

<400> 3252
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 20 25 30
 Val Val Asp Leu Ile Phe Leu Asn Thr Glu Val Ser Leu Ser Gln Ala
 35 40 45
 Leu Glu Asp Val Ser Arg Gly Gly Ser Pro Phe Ala Ile Val Ile Thr
 50 55 60
 Gln Gln His Gln Ile His Arg Ser Cys Thr Val Asn Ile Met Phe Gly
 65 70 75 80
 Thr Pro Gln Glu His Arg Asn Met Pro Gln Ala Asp Ala Met Val Leu
 85 90 95
 Val Ala Arg Asn Tyr Glu Arg Tyr Lys Asn Glu Cys Arg Glu Lys Glu
 100 105 110
 Arg Glu Glu Ile Ala Arg Gln Ala Lys Met Ala Asp Glu Ala Ile
 115 120 125
 Leu Gln Glu Arg Glu Arg Gly Gly Pro Glu Glu Gly Val Arg Gly Gly
 130 135 140
 His Pro Pro Ala Ile Gln Ser Leu Ile Asn Leu Leu Ala Asp Asn Arg
 145 150 155 160
 Tyr Leu Thr Ala Glu Glu Thr Asp Lys Ile Ile Asn Tyr Leu Arg Glu
 165 170 175
 Arg Lys Glu Arg Leu Met Arg Ser Ser Thr Asp Ser Leu Pro Gly Glu
 180 185 190
 Leu Arg Gly Arg Pro Arg Pro Asp Phe Pro Pro Thr Thr Arg Gly Asp
 195 200 205
 Leu Gly Cys Leu Ala Glu Asp Thr Ala Lys Leu Pro Thr Ala Pro Glu
 210 215 220
 Arg Pro Ser Ala Pro Leu Cys Tyr Thr His Ser Ile Cys Thr Pro His
 225 230 235 240
 Leu Pro Ala Arg Ala Ser Gly Gln Asn Pro Gln Pro Leu Gln
 245 250

<210> 3253
 <211> 686
 <212> DNA
 <213> Homo sapiens

<400> 3253
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 120
 gtaaaatggc atcaagggtc cccaccggtt caagatgggg accttgacta tatggcaatg
 180
 aagacaggga caccctggca gtagcaggta gcctttggcc atctctgcag caggctggtg
 240

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 360
 ctcgtcctcc ctcgtggcct catgttcctg tgatgggaag aagccgggga gtcccaggtc
 420
 tttggcagtc atgtgggggc ttttgaaagc agggtagcca tctgttagct tgggggttggg
 480
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 540
 ttgcggcgtg accctggagt atttgtgctt cctgtagggc tgatagtcga ccatgtggga
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 686

<210> 3254

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3254

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Tyr	Gln	Ser	Ser	His	Met	Val	Asp	Tyr	Gln	Pro	Tyr	Arg	Lys	His	Lys
			20					25					30		
Tyr	Ser	Arg	Val	Thr	Pro	Gln	Glu	Gln	Ala	Lys	Leu	Asp	Ala	Gln	Leu
		35					40					45			
Arg	Asp	Lys	Glu	Phe	Tyr	Arg	Pro	Ile	Pro	Asn	Pro	Asn	Pro	Lys	Leu
	50					55				60					
Thr	Asp	Gly	Tyr	Pro	Ala	Phe	Lys	Arg	Pro	His	Met	Thr	Ala	Lys	Asp
65					70					75				80	
Leu	Gly	Leu	Pro	Gly	Phe	Phe	Pro	Ser	Gln	Glu	His	Glu	Ala	Thr	Arg
				85					90					95	
Glu	Asp	Glu	Arg	Lys	Phe	Thr	Ser	Thr	Cys	His	Phe	Thr	Tyr	Pro	Ala
			100					105					110		
Ser	His	Asp	Leu	His	Leu	Ala	Gln	Gly	Asp	Pro	Asn	Gln	Val	Leu	Gln
		115					120				125				
Ser	Ala	Asp	Phe	Pro	Cys	Leu	Val	Asp	Pro	Lys	His	Gln	Pro	Ala	Ala
	130					135					140				
Glu	Met	Ala	Lys	Gly	Tyr	Leu	Leu	Leu	Pro	Gly	Cys	Pro	Cys	Leu	His
145					150					155				160	
Cys	His	Ile	Val	Lys	Val	Pro	Ile	Leu	Asn	Arg	Trp	Gly	Pro	Leu	Met
			165					170						175	
Pro	Phe	Tyr	Gln												
			180												

<210> 3255

<211> 724

<212> DNA

<213> Homo sapiens

<400> 3255

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 120
 ggactcatgt cgaggtcggg gaaggatgta aaacccggac ggacatcact gtaggccgca
 180
 cctgctgaga ggccagagct gcctccttga gagtgaagtt gtttacagac aagagaagag
 240
 atcttggcgg acacatcaca gctagccgcg aatcccgaag ggtcagcaga gcctagaaag
 300
 gaatatgagg ggggtcggaa tgaggcaggc gaaaggcacg gacgtgggag ggcacggcta
 360
 cccaacgggg acacctacga agggagctac gaattcggta aaagacatgg ccaggggatc
 420
 taaaaattta aaaatgggtgc tcgatatatc ggagaatatg ttagaaataa aaagcacggg
 480
 caaggcactt ttatatatcc agatggatcc agatatgaag gagagtgggc aaatgacctg
 540
 cggcacggcc atggcgtata ctactacatc aataatgaca cctacactgg agagtgggtt
 600
 gctcatcaaa ggcattggga aggcacctat ttatacgag agacgggcag taagtatgtt
 660
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 720
 tacc
 724

<210> 3256

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3256

Ser	Cys	Leu	Gln	Thr	Arg	Glu	Glu	Ile	Leu	Ala	Asp	Thr	Ser	Gln	Leu
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Ala	Ala	Asn	Pro	Glu	Gly	Ser	Ala	Glu	Pro	Arg	Lys	Glu	Tyr	Glu	Gly
		20						25				30			
Gly	Arg	Asn	Glu	Ala	Gly	Glu	Arg	His	Gly	Arg	Gly	Arg	Ala	Arg	Leu
		35					40					45			
Pro	Asn	Gly	Asp	Thr	Tyr	Glu	Gly	Ser	Tyr	Glu	Phe	Gly	Lys	Arg	His
	50					55					60				
Gly	Gln	Gly	Ile	Tyr	Lys	Phe	Lys	Asn	Gly	Ala	Arg	Tyr	Ile	Gly	Glu
65					70					75				80	
Tyr	Val	Arg	Asn	Lys	Lys	His	Gly	Gln	Gly	Thr	Phe	Ile	Tyr	Pro	Asp
			85						90					95	
Gly	Ser	Arg	Tyr	Glu	Gly	Glu	Trp	Ala	Asn	Asp	Leu	Arg	His	Gly	His
		100						105					110		
Gly	Val	Tyr	Tyr	Tyr	Ile	Asn	Asn	Asp	Thr	Tyr	Thr	Gly	Glu	Trp	Phe
	115					120						125			
Ala	His	Gln	Arg	His	Gly	Gln	Gly	Thr	Tyr	Leu	Tyr	Ala	Glu	Thr	Gly
	130					135					140				
Ser	Lys	Tyr	Val	Gly	Thr	Trp	Val	Asn	Gly	Gln	Gln	Glu	Gly	Thr	Ala
145					150					155				160	
Glu	Leu	Ile	His	Leu	Asn	His	Arg	Tyr							

165

<210> 3257
 <211> 368
 <212> DNA
 <213> Homo sapiens

<400> 3257
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 agtgaagaca tcagccagac ctccaagtac agtcccatct actcgccaga cccctactat
 180
 gcttcggagt ctgagtactg gacctaccat ggggtcccca aagtgccccg agccagaagg
 240
 ttctcgtctg gaggagagga ggatgatttt gaccgcagca tgcacaagct ccaaagtgga
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 tggcgcgc
 368

<210> 3258
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 3258
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 Pro Thr Phe Ser Arg Ser Pro His His Tyr Tyr Arg Ser Gly Asp Leu
 20 25 30
 Ser Thr Ala Thr Lys Ser Glu Thr Ser Glu Asp Ile Ser Gln Thr Ser
 35 40 45
 Lys Tyr Ser Pro Ile Tyr Ser Pro Asp Pro Tyr Tyr Ala Ser Glu Ser
 50 55 60
 Glu Tyr Trp Thr Tyr His Gly Ser Pro Lys Val Pro Arg Ala Arg Arg
 65 70 75 80
 Phe Ser Ser Gly Gly Glu Glu Asp Asp Phe Asp Arg Ser Met His Lys
 85 90 95
 Leu Gln Ser Gly Ile Gly Arg Leu Ile Leu Lys Glu Glu Met Lys Ala
 100 105 110
 Arg Ser Ser Ser Tyr Ala Asp Pro Trp Arg
 115 120

<210> 3259
 <211> 747
 <212> DNA
 <213> Homo sapiens

<400> 3259
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 120
 caccattgaa cccggagcgc tgcggcgggg caacatgagc tccctgggct ttacgagcaa
 180
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 240
 cgcgcctgcg ggctctgagg tcgaccgagt catcctcaag gccaacgaga cttttgcttt
 300
 tgtgggcaac gtgactcact atgcccaggt ctggctcaac atctcggcgg agatccgcag
 360
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 420
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 480
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 540
 caacgcggcc tgcggctgga tccagttcat gtccaagggt agcgtggaca tcttcaaggg
 600
 cttccccgac gaggagagca ttgtcaacta caccctcaac caggcctacc aggacaacgt
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 720
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 747

<210> 3260

<211> 197

<212> PRT

<213> Homo sapiens

<400> 3260

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Leu	Val	His	Leu	Met	Thr	Ser	Asn	Pro	Lys	Ile	Leu	Tyr	Ala	Pro	Ala
			20					25					30		
Gly	Ser	Glu	Val	Asp	Arg	Val	Ile	Leu	Lys	Ala	Asn	Glu	Thr	Phe	Ala
		35					40					45			
Phe	Val	Gly	Asn	Val	Thr	His	Tyr	Ala	Gln	Val	Trp	Leu	Asn	Ile	Ser
	50				55						60				
Ala	Glu	Ile	Arg	Ser	Phe	Leu	Glu	Gln	Gly	Arg	Leu	Gln	Gln	His	Leu
65					70				75					80	
Arg	Trp	Leu	Gln	Gln	Tyr	Val	Ala	Glu	Leu	Arg	Leu	His	Pro	Glu	Ala
			85					90						95	
Leu	Asn	Leu	Ser	Leu	Asp	Glu	Leu	Pro	Pro	Ala	Leu	Arg	Gln	Asp	Asn
			100					105					110		
Phe	Ser	Leu	Pro	Ser	Gly	Met	Ala	Leu	Leu	Gln	Gln	Leu	Asp	Thr	Ile
		115					120					125			
Asp	Asn	Ala	Ala	Cys	Gly	Trp	Ile	Gln	Phe	Met	Ser	Lys	Val	Ser	Val
	130					135					140				
Asp	Ile	Phe	Lys	Gly	Phe	Pro	Asp	Glu	Glu	Ser	Ile	Val	Asn	Tyr	Thr
145					150				155					160	
Leu	Asn	Gln	Ala	Tyr	Gln	Asp	Asn	Val	Thr	Val	Phe	Ala	Ser	Val	Ile
			165					170					175		
Phe	Gln	Thr	Arg	Lys	Asp	Gly	Ser	Ser	Arg	Leu	Thr	Cys	Thr	Thr	Arg

180
Ser Ala Arg Thr Pro
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185

190

<210> 3261

<211> 1323

<212> DNA

<213> Homo sapiens

<400> 3261

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120
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180
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240
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420
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480
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840
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1140
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1200
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1320

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1323

<210> 3262
<211> 81
<212> PRT
<213> Homo sapiens

<400> 3262
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Arg Thr Asp Leu Lys Gly Asp Asp Leu Glu Glu Gly Val Thr Ser Glu
20 25 30
Glu Phe Asp Lys Phe Leu Glu Glu Arg Ala Lys Ala Ala Glu Met Val
35 40 45
Pro Asp Leu Pro Ser Pro Pro Met Glu Ala Pro Ala Pro Ala Ser Asn
50 55 60
Pro Ser Gly Arg Lys Lys Pro Glu Arg Ser Glu Asp Ala Leu Phe Ala
65 70 75 80
Leu

<210> 3263
<211> 1128
<212> DNA
<213> Homo sapiens

<400> 3263
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120
gagctggaga gagaggccaa gaaatcagcg aagaagccgc agtcctcaag cacagagccc
180
gccaggaaac ctggccagaa ggagaagaga gtgcggccccg aggagaagca acaagccaag
240
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 960
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 1020
 cgctgtgctg tttgtatttg ttcccttggg ttttttttct ctgcctaatt tctgtgattt
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 1128

<210> 3264
 <211> 308
 <212> PRT
 <213> Homo sapiens

<400> 3264
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 Ser Ser Asp Ser Glu Pro Glu Ala Glu Leu Glu Arg Glu Ala Lys Lys
 35 40 45
 Ser Ala Lys Lys Pro Gln Ser Ser Thr Glu Pro Ala Arg Lys Pro
 50 55 60
 Gly Gln Lys Glu Lys Arg Val Arg Pro Glu Glu Lys Gln Gln Ala Lys
 65 70 75 80
 Pro Val Lys Val Glu Arg Thr Arg Lys Arg Ser Glu Gly Phe Ser Met
 85 90 95
 Asp Arg Lys Val Glu Lys Lys Lys Glu Pro Ser Val Glu Glu Lys Leu
 100 105 110
 Gln Lys Leu His Ser Glu Ile Lys Phe Ala Leu Lys Val Asp Ser Pro
 115 120 125
 Asp Val Lys Gly Cys Leu Asn Ala Leu Glu Glu Leu Gly Thr Leu Gln
 130 135 140
 Val Thr Ser Gln Ile Leu Gln Lys Asn Thr Asp Val Val Ala Thr Leu
 145 150 155 160
 Lys Lys Ile Arg Arg Tyr Lys Ala Asn Lys Asp Val Met Glu Lys Ala
 165 170 175
 Ala Glu Val Tyr Thr Arg Leu Lys Ser Arg Val Leu Gly Pro Lys Ile
 180 185 190
 Glu Ala Val Gln Lys Val Asn Lys Ala Gly Met Glu Lys Glu Lys Ala
 195 200 205
 Glu Glu Lys Leu Ala Gly Glu Glu Leu Ala Gly Glu Glu Ala Pro Gln
 210 215 220
 Glu Lys Ala Glu Asp Lys Pro Ser Thr Asp Leu Ser Ala Pro Val Asn
 225 230 235 240
 Gly Glu Ala Thr Ser Gln Lys Gly Glu Ser Ala Glu Asp Lys Glu His
 245 250 255
 Glu Glu Gly Arg Asp Ser Glu Glu Gly Pro Arg Cys Gly Ser Ser Glu
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 Asp Leu His Asp Ser Val Arg Glu Gly Pro Asp Leu Asp Arg Pro Gly

BNSDOCID: <WO 0058473A2_I_>

<400> 3267

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120
cattgtggga agtttcaaga tgccttgag ccattgctca gctgggtggc agataccgag
180
gagctcatag ccaatcagaa acctccatct gctgagtata aagtggtgaa agcacagatc
240
caagaacaga agttgctcca gcggctccta gatgatcgaa aggccacagt agacatgctt
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caagcagaag gaggcagaat agcccagtca gcagagctgg ctgatagaga gaaaatcact
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ggacagctgg agagtcttga aagtagatgg act
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<210> 3268

<211> 131

<212> PRT

<213> Homo sapiens

<400> 3268

Val	Glu	Tyr	Ala	Cys	Arg	Val	Gln	Gly	Leu	Glu	His	Asp	Met	Glu	Glu
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Ile	Asn	Ala	Arg	Trp	Asn	Thr	Leu	Asn	Lys	Lys	Val	Ala	Gln	Arg	Ile
			20					25					30		
Ala	Gln	Leu	Gln	Glu	Ala	Leu	Leu	His	Cys	Gly	Lys	Phe	Gln	Asp	Ala
		35					40					45			
Leu	Glu	Pro	Leu	Leu	Ser	Trp	Leu	Ala	Asp	Thr	Glu	Glu	Leu	Ile	Ala
		50				55					60				
Asn	Gln	Lys	Pro	Pro	Ser	Ala	Glu	Tyr	Lys	Val	Val	Lys	Ala	Gln	Ile
65					70				75					80	
Gln	Glu	Gln	Lys	Leu	Leu	Gln	Arg	Leu	Leu	Asp	Asp	Arg	Lys	Ala	Thr
				85					90					95	
Val	Asp	Met	Leu	Gln	Ala	Glu	Gly	Gly	Arg	Ile	Ala	Gln	Ser	Ala	Glu
			100				105					110			
Leu	Ala	Asp	Arg	Glu	Lys	Ile	Thr	Gly	Gln	Leu	Glu	Ser	Leu	Glu	Ser
		115					120					125			
Arg	Trp	Thr													
		130													

<210> 3269

<211> 1423

<212> DNA

<213> Homo sapiens

<400> 3269

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120
aaatatagga tgtggaagcg aaaaaatattc tgggtagcaa gtgaggtgta ctcaaaaata
180

agcaaaagtc acgtgggtct gatttttatac cctcgctgga aagcttggtc tcagacacac
 240
 tgttactgca agtgtgtgtg aggggggaaac tctcacacac tttgcagttg aggacagggc
 300
 tagactttga ggtggaccct ggctcccagg gctgtgtact cccagcccggt gtttctcttt
 360
 tgctcagact gaacaagtgg aacgaaatta cattaaagaa aagaaggcag cagtgaagaa
 420
 atttgaagac aagaaggttg agctgaaaga gaacctgatt gctgagctag aagaaaagaa
 480
 gaaaatgatt gaaaacgaaa tgctgacaat ggaactgaat ggagattcta tggagggtgaa
 540
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 600
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 660
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 720
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 840
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 960
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 1020
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 1140
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 1200
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 1260
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 1320
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 1380
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 1423

<210> 3270

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3270

Met	Ile	Glu	Asn	Glu	Met	Leu	Thr	Met	Glu	Leu	Asn	Gly	Asp	Ser	Met
1				5				10						15	
Glu	Val	Lys	Pro	Ile	Met	Thr	Arg	Lys	Leu	Arg	Arg	Arg	Pro	Asn	Asp
			20					25					30		
Pro	Val	Pro	Ile	Pro	Asp	Lys	Arg	Arg	Lys	Pro	Ala	Pro	Ala	Gln	Leu

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      35              40              45
Asn Tyr Leu Leu Thr Asp Glu Gln Ile Met Glu Asp Leu Arg Thr Leu
  50              55              60
Asn Lys Leu Lys Ser Pro Lys Arg Pro Ala Ser Pro Ser Ser Pro Glu
  65              70              75              80
His Leu Pro Ala Thr Pro Ala Glu Ser Pro Ala Gln Arg Phe Glu Ala
      85              90              95
Arg Ile Glu Asp Gly Lys Leu Tyr Tyr Asp Lys Arg Trp Tyr His Lys
      100              105              110
Ser Gln Ala Ile Tyr Leu Glu Ser Lys Asp Asn Gln Lys Leu Ser Cys
      115              120              125
Val Ile Ser Ser Val Gly Ala Asn Glu Ile Trp Val Arg Lys Thr Ser
      130              135              140
Asp Ser Thr Lys Met Arg Ile Tyr Leu Gly Gln Leu Gln Arg Gly Leu
  145              150              155              160
Phe Val Ile Arg Arg Arg Ser Ala Ala
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<210> 3271

<211> 464

<212> DNA

<213> Homo sapiens

<400> 3271

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  120
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  180
atgagaaggg ccccggcagc aagagatcca atgatggtgg ccgccaggat cccagcgttg
  240
gtgggcaggt gtgtactggg cagctcctta ttcttttcag ctacctggac ctcagtcttg
  300
gccttcatag tccattcaga gttgatggta atggctactt ggtaggtgcc actgtctgta
  360
ggctgggcgc ggcgcagcag catggaacca ttggggaagc ccacgatgtc tcgctgtccc
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<210> 3272

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3272

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Met Gly Gln Arg Asp Ile Val Gly Phe Pro Asn Gly Ser Met Leu Leu
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Arg Arg Ala Gln Pro Thr Asp Ser Gly Thr Tyr Gln Val Ala Ile Thr
      20              25              30
Ile Asn Ser Glu Trp Thr Met Lys Ala Lys Thr Glu Val Gln Val Ala
      35              40              45
Glu Lys Asn Lys Glu Leu Pro Ser Thr His Leu Pro Thr Asn Ala Gly

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50		55		60
Ile Leu Ala Ala Thr	Ile Ile Gly Ser Leu	Ala Ala Gly Ala Leu Leu		
65	70	75	80	
Ile Ser Cys Ile Ala Tyr	Leu Leu Val Thr Arg	Asn Trp Arg Gly Gln		
	85	90	95	
Ser His Arg Leu Pro Ala	Pro Arg Gly Gln Gly	Ser Leu Ser Ile Leu		
	100	105	110	
Cys Ser Ala Val Ser Pro	Val Pro Ser Val Thr	Pro Ser Thr Trp Met		
	115	120	125	
Ala Thr Thr Glu Lys Pro	Glu Leu Gly Pro Ala	His		
130	135	140		

<210> 3273

<211> 387

<212> DNA

<213> Homo sapiens

<400> 3273

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120
aagtgcagaa ggcctgaaat aaccaactgg gtccgtctca cccgtgaaat aaaacacaag
180
aatattgtaa cttttcatga atggtatgaa acaagcaacc acctctggct agtgggtggaa
240
ctccgcacag gtggttcctt aaaaacagtt attgctcaag atgaaaacct cccagaagat
300
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387

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<210> 3274

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3274

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Gly Ser Lys Thr Val	Val Tyr Lys Gly Arg	Arg Lys Gly Thr Ile Asn
	20	25
Phe Val Ala Ile Leu	Cys Thr Asp Lys Cys	Arg Arg Pro Glu Ile Thr
	35	40
Asn Trp Val Arg Leu	Thr Arg Glu Ile Lys	His Lys Asn Ile Val Thr
	50	55
Phe His Glu Trp Tyr	Glu Thr Ser Asn His	Leu Trp Leu Val Val Glu
65	70	75
Leu Arg Thr Gly Gly	Ser Leu Lys Thr Val	Ile Ala Gln Asp Glu Asn
	85	90
Leu Pro Glu Asp Val	Val Arg Glu Phe Gly	Ile Asp Leu Ile Ser Gly
	100	105
Leu His His Leu His	Lys Leu Gly Ile Leu	Phe Val Thr Phe Leu Leu

115 120 125
 Gly

 <210> 3275
 <211> 1266
 <212> DNA
 <213> Homo sapiens

 <400> 3275
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 120
 ttttctttta tagagacatg aataacagat acactgaagt ataaacaaaa attggcctga
 180
 agcgtccggt ggccggctta gtaggagct atggctaaac atcatcctga tttgatcttt
 240
 tgccgcaagc aggctggtgt tgccatcgga agactgtgtg aaaaatgtga tggcaagtgt
 300
 gtgatttgtg actcctatgt gcgtccctgc actctggtgc gcatatgtga tgagtgtaac
 360
 tatggatctt accaggggag ctgtgtgatc tgtggaggac ctgggggtctc tgatgcctat
 420
 tattgtaagg agtgcacat ccaggagaag gacagagatg gctgcccaa gattgtcaat
 480
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 540
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 600
 tgcctactac taccagcaga aaggagcag agccagagc atcaccagga gtgcctgcta
 660
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 720
 aaaggattct tcacagagca ctctggcaca ccatatcgga gaaaaattga tagattagtt
 780
 aatggttttt cttgaattcg agaagcatag atctgttctc catattggta tgttctccct
 840
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 900
 aagcgacgcc cagtgaaaaa catgatcttg cagcagctct ggtggcagct gtccttgagg
 960
 aacctttggt gtgtggtggg aagctatcag aacaagaaat gtaggcattt cccgtttttt
 1020
 ttgggggggg ggtggggggg cagggctctg ccctcttgaa aggcatttac ttgtttaaca
 1080
 cttgtccagc tacagtgggg tacagtagct ggctattcac aggcattcac atagcccact
 1140
 agtctcatat tattttcctt ttgagaaatt ggaaactctt tctgttgcta ttatattaat
 1200
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 1260
 aaaaaa
 1266

<210> 3276
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 3276
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 Val Ala Ile Gly Arg Leu Cys Glu Lys Cys Asp Gly Lys Cys Val Ile
 20 25 30
 Cys Asp Ser Tyr Val Arg Pro Cys Thr Leu Val Arg Ile Cys Asp Glu
 35 40 45
 Cys Asn Tyr Gly Ser Tyr Gln Gly Arg Cys Val Ile Cys Gly Gly Pro
 50 55 60
 Gly Val Ser Asp Ala Tyr Tyr Cys Lys Glu Cys Thr Ile Gln Glu Lys
 65 70 75 80
 Asp Arg Asp Gly Cys Pro Lys Ile Val Asn Leu Gly Ser Ser Lys Thr
 85 90 95
 Asp Leu Phe Tyr Glu Arg Lys Lys Tyr Gly Phe Lys Lys Arg
 100 105 110

<210> 3277
 <211> 1435
 <212> DNA
 <213> Homo sapiens

<400> 3277
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 120
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 180
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 240
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 300
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 360
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 420
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 480
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 540
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 600
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 660
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 720
 gctactacta tcccatgagc atgtaccaga gctatggctc cccttcccag tatgggatgg
 780

ccggctccta tggctagcca caccacagca gccatccgca ccccaacacc aagggactct
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 1080
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 1200
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 1320
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 1435

<210> 3278

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3278

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Tyr	Ser	Met	Val	Ala	Gly	Ala	Gly	Arg	Glu	Asn	Gly	Met	Glu	Thr	Pro
			20					25				30			
Met	His	Glu	Asn	Pro	Glu	Trp	Glu	Lys	Ala	Arg	Gln	Ala	Leu	Ala	Ser
		35					40				45				
Ile	Ser	Lys	Ser	Gly	Ala	Ala	Gly	Gly	Ser	Ala	Lys	Ser	Ser	Ser	Asn
	50				55						60				
Gly	Pro	Val	Ala	Ser	Ala	Ser	Thr	Cys	Pro	Arg	Gln	Lys	Pro	Gln	Leu
65					70					75				80	
Cys	Ser	Ser	Ser	Ser	Thr	Thr	Ser	Gly	Thr	Ser	Ser	Thr	Thr	Met	Pro
				85				90						95	
Thr	Pro	Thr	Ala	Thr	Thr	Ile	Pro								
				100											

<210> 3279

<211> 1130

<212> DNA

<213> Homo sapiens

<400> 3279

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 120

cctgagccag aaccaggcac catggtggag aagggatcag atagctcctc agagaaggggt
 180
 ggggtgcctg ggacccccag caccagagc ctaggcagcc ggaacttcat ccgcaacagc
 240
 aagaagatgc agagctggta cagtatgctg agccccactt ataagcagcg taatgaggac
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 420
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 480
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 660
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 720
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 960
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 1020
 cccttgatc tgetgcccag tgaggagcta ttgacagaca caagtaactc ctcttcaccc
 1080
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 1130

<210> 3280

<211> 376

<212> PRT

<213> Homo sapiens

<400> 3280

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Gly	Arg	Ser	Thr	Pro	Ser	Ser	Ser	Pro	Ser	Leu	Arg	Lys	Arg	Leu	Gln
			20					25					30		
Leu	Leu	Pro	Pro	Ser	Arg	Pro	Pro	Pro	Glu	Pro	Glu	Pro	Gly	Thr	Met
		35					40					45			
Val	Glu	Lys	Gly	Ser	Asp	Ser	Ser	Ser	Glu	Lys	Gly	Gly	Val	Pro	Gly
	50					55					60				
Thr	Pro	Ser	Thr	Gln	Ser	Leu	Gly	Ser	Arg	Asn	Phe	Ile	Arg	Asn	Ser
65					70				75					80	
Lys	Lys	Met	Gln	Ser	Trp	Tyr	Ser	Met	Leu	Ser	Pro	Thr	Tyr	Lys	Gln
			85					90						95	
Arg	Asn	Glu	Asp	Phe	Arg	Lys	Leu	Phe	Ser	Lys	Leu	Pro	Glu	Ala	Glu

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<210> 3281
<211> 842
<212> DNA
<213> Homo sapiens
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2472

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 720
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<210> 3282

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3282

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Pro	Asp	Thr	Ser	Leu	Gln	Val	Leu	Leu	Val	Ala	Gly	Pro	Thr	Lys	Ala
			20				25					30			
Pro	Trp	Pro	Arg	Gln	Pro	Gly	Gly	Cys	Trp	Thr	Val	Gly	Leu	Pro	Ala
		35				40					45				
Thr	Ser	Phe	Ala	Arg	Gly	Lys	Glu	His	His	Val	Gly	His	Ile	His	Glu
	50				55					60					
Gly	Thr	Gly	Asn	Ser	Val	Val	Pro	Ser	Val	Thr	Pro	Cys	Gln	Asp	Thr
65				70					75					80	
Gln	Asp	Glu	Asn	Pro	Ala	Pro	Glu	Arg	Ala	Ala	Gly	Ile	Ser	Ser	Thr
			85				90						95		
His	Thr	Gln	Ala	Leu	Cys	Pro	Gln	Ala	Pro	Pro	Ser	Val	Leu	Pro	Gly
		100					105					110			
Asn	Asn	Thr	Leu	Cys	Glu	Pro	Val	Glu	Pro	Gly	Thr	Ala	Trp	Ala	
	115					120				125					
Ser	Glu	Gln	Ser	His	Glu	Ile	Arg	Val	Arg	Thr	Pro	Ser	Cys	Arg	Gly
	130				135					140					
Arg	Asp														
145															

<210> 3283

<211> 3268

<212> DNA

<213> Homo sapiens

<400> 3283

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120
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240
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<210> 3284
 <211> 1012
 <212> PRT
 <213> Homo sapiens

<400> 3284

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			20					25					30		
Ala	Phe	Thr	Arg	Xaa	His	Val	Cys	Ala	Glu	Asn	Leu	Pro	Pro	Val	Leu
		35					40					45			
Met	Glu	His	Lys	Ala	Thr	Thr	Ile	Gln	Lys	His	Val	Arg	Gly	Trp	Met
	50					55					60				
Ala	Arg	Arg	His	Phe	Gln	Arg	Leu	Arg	Asp	Ala	Ala	Ile	Val	Ile	Gln
65					70				75					80	
Cys	Ala	Phe	Arg	Met	Leu	Lys	Ala	Arg	Arg	Glu	Leu	Lys	Ala	Leu	Arg
				85					90					95	
Ile	Glu	Ala	Arg	Ser	Ala	Glu	His	Leu	Lys	Arg	Leu	Asn	Val	Gly	Met
			100					105					110		
Glu	Asn	Lys	Val	Val	Gln	Leu	Gln	Arg	Lys	Ile	Asp	Glu	Gln	Asn	Lys
	115					120					125				
Glu	Phe	Lys	Thr	Leu	Ser	Glu	Gln	Leu	Ser	Val	Thr	Thr	Ser	Thr	Tyr
	130					135					140				
Thr	Met	Glu	Val	Glu	Arg	Leu	Lys	Lys	Glu	Leu	Val	His	Tyr	Gln	Gln
145					150				155					160	
Ser	Pro	Gly	Glu	Asp	Thr	Ser	Leu	Arg	Leu	Gln	Glu	Glu	Val	Glu	Ser
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		180					185						190		
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Lys	Glu	Asn	Leu	Leu	Met	Lys	Lys	Glu	Leu	Glu	Glu	Glu	Arg	Ser	Arg
			245					250					255		
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		260					265						270		
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			325					330					335		
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			405						410					415	
Ala	Thr	Gln	Asn	Ser	Ser	His	Gly	Ser	Pro	Asp	Ser	Tyr	Ser	Leu	
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		450				455					460				
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Trp	Pro	Asn	Ser	Glu	Arg	His	Val	Asp	Gln	Glu	Asp	Ala	Ile	Glu	Ala
			485					490					495		
Tyr	His	Gly	Val	Cys	Gln	Thr	Asn	Arg	Leu	Leu	Glu	Ala	Gln	Leu	Gln
			500				505						510		
Ala	Gln	Ser	Leu	Glu	His	Glu	Glu	Glu	Val	Glu	His	Leu	Lys	Ala	Gln
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		530				535					540				
Gln	Thr	Leu	Leu	Leu	Ser	Pro	Glu	Ala	Gln	Val	Glu	Phe	Gly	Val	Gln
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Gln	Glu	Ile	Ser	Arg	Leu	Thr	Asn	Glu	Asn	Leu	Asp	Leu	Lys	Glu	Leu
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		580					585					590			
Ile	Tyr	Met	Lys	Lys	Ala	Gln	Asp	Leu	Glu	Ala	Ala	Gln	Ala	Leu	Ala
		595					600					605			
Gln	Ser	Glu	Arg	Lys	Arg	His	Glu	Leu	Asn	Arg	Gln	Val	Thr	Val	Gln
		610				615					620				
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Glu	Ala	Leu	Leu	Ile	Arg	Asn	Leu	Val	Thr	Asp	Leu	Lys	Pro	Gln	Met
			645					650					655		
Leu	Ser	Gly	Thr	Val	Pro	Cys	Leu	Pro	Ala	Tyr	Ile	Leu	Tyr	Met	Cys
		660					665					670			
Ile	Arg	His	Ala	Asp	Tyr	Thr	Asn	Asp	Asp	Leu	Lys	Val	His	Ser	Leu
		675				680						685			
Leu	Thr	Ser	Thr	Ile	Asn	Gly	Ile	Lys	Lys	Val	Leu	Lys	Lys	His	Asn
		690				695			700						
Asp	Asp	Phe	Glu	Met	Thr	Ser	Phe	Trp	Leu	Ser	Asn	Thr	Cys	Arg	Leu
705					710				715					720	
Leu	His	Cys	Leu	Lys	Gln	Tyr	Ser	Gly	Asp	Glu	Gly	Phe	Met	Thr	Gln
			725					730					735		
Asn	Thr	Ala	Lys	Gln	Asn	Glu	His	Cys	Leu	Lys	Asn	Phe	Asp	Leu	Thr
		740					745					750			
Glu	Tyr	Arg	Gln	Val	Leu	Ser	Asp	Leu	Ser	Ile	Gln	Ile	Tyr	Gln	Gln
		755					760					765			
Leu	Ile	Lys	Ile	Ala	Glu	Gly	Val	Leu	Gln	Pro	Met	Ile	Val	Ser	Ala
		770				775			780						
Met	Leu	Glu	Asn	Glu	Ser	Ile	Gln	Gly	Leu	Ser	Gly	Val	Lys	Pro	Thr
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<210> 3285
<211> 1518
<212> DNA
<213> Homo sapiens
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2478

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 780
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 840
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 960
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 1080
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 1200
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<210> 3286

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3286

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Lys	Asn	Leu	Arg	Tyr	Glu	Ala	Ala	Thr	Ser	Asp	Thr	Tyr	Arg	Lys	Gly
			20					25					30		
Lys	Asn	Asn	Asp	Asn	Thr	Arg	Pro	Ala	Pro	Pro	Pro	Lys	Ser	Cys	Cys
		35					40					45			
Cys	Glu	Leu	Arg	Leu	Gln	Lys	Arg	Thr	His	Thr	Val	Ala	Asp	Lys	Thr
		50				55					60				
Gln	Ala	Arg	Arg	Met	Phe	Glu	Ser	Gln	Ser	Ala	Leu	Ser	Leu	Val	Pro
65					70					75				80	
Val	Thr	Ser	Tyr	Val	Gln	Leu	Pro	Gly	Pro	Ile	Pro	Tyr	Ser	Asp	Cys
			85					90					95		
Arg	Leu	Arg	Thr	Glu	Asp	Ala	Pro	Leu	Leu	Ser	Leu	His	Phe	Asp	Leu
			100					105					110		
Leu	Phe	Pro	Leu	Lys	Thr	Arg	Arg	Pro	Ala	Phe	Pro	Lys	Thr	Ala	Trp

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<210> 3287

<211> 921

<212> DNA

<213> Homo sapiens

<400> 3287

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180
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aatctattct gagaactctt c
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<210> 3288

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3288

Met	Thr	Asp	Ser	Arg	Glu	Asp	Ser	Val	Arg	Arg	Arg	Lys	Ser	Gly	Ala
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Leu	Gly	Arg	Val	Gly	Ile	Val	Ser	Pro	Ala	Pro	Phe	Pro	Ala	Pro	Gln
			20				25					30			
Ser	Cys	Ser	Phe	Ser	Phe	Gly	Leu	Ser	Lys	Tyr	Pro	Gly	Pro	Pro	Cys


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      35      40      45
Ile Pro Leu Pro Phe Ser Cys Gly Cys Gly Ala Ser Leu Asn Arg Ser
      50      55      60
Thr Phe Leu Phe Pro Ser Thr Arg Asp Arg Glu Ser Leu Lys Gly Ser
65      70      75      80
Gly Ala Pro Ser Ala His Leu Asp Gly Ala Gly Asp Ala Gln Arg Arg
      85      90      95
Phe Arg Ala Leu Tyr Phe Gln Leu Gln His Ser Gln Val Phe Thr Ala
      100      105      110
Gln Gly Asp Gly Ala Arg Val Thr Arg Asn Pro Gly Glu Gly Arg Ser
      115      120      125
Phe Pro Arg Arg Gly Ala Thr Ser Phe Pro Asp Trp Ala Tyr Ala Gly
      130      135      140
Gly Arg Gln Leu
145

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<210> 3289
 <211> 554
 <212> DNA
 <213> Homo sapiens

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<400> 3289
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300
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420
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<210> 3290
 <211> 129
 <212> PRT
 <213> Homo sapiens

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<400> 3290
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Pro Cys Lys Ala Arg Leu Leu Leu Pro Lys Gly Trp Gly Asp Val Leu
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Gly Ser Leu Thr Gln Cys Arg Arg Ala Trp Val Pro Pro Trp Thr Gln

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<400> 3291
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1020

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<210> 3294

<211> 353

<212> PRT

<213> Homo sapiens

<400> 3294

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			20					25				30			
Thr	Ser	Leu	Pro	Pro	Gly	Pro	Pro	Ala	Gly	Arg	Arg	His	Leu	Pro	Leu
		35				40						45			
Ser	Arg	Arg	Arg	Arg	Glu	Met	Ser	Ser	Asn	Lys	Glu	Gln	Arg	Ser	Ala
		50				55					60				
Val	Phe	Val	Ile	Leu	Phe	Ala	Leu	Ile	Thr	Ile	Leu	Ile	Leu	Tyr	Ser
65					70					75				80	
Ser	Asn	Ser	Ala	Asn	Glu	Val	Phe	His	Tyr	Gly	Ser	Leu	Arg	Gly	Arg
			85						90					95	
Ser	Arg	Arg	Pro	Val	Asn	Leu	Lys	Lys	Trp	Ser	Ile	Thr	Asp	Gly	Tyr
			100					105					110		
Val	Pro	Ile	Leu	Gly	Asn	Lys	Thr	Leu	Pro	Ser	Arg	Cys	His	Gln	Cys
		115				120						125			
Val	Ile	Val	Ser	Ser	Ser	Ser	His	Leu	Leu	Gly	Thr	Lys	Leu	Gly	Pro
	130					135					140				
Glu	Ile	Glu	Arg	Ala	Glu	Cys	Thr	Ile	Arg	Met	Asn	Asp	Ala	Pro	Thr
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Thr	Gly	Tyr	Ser	Ala	Asp	Val	Gly	Asn	Lys	Thr	Thr	Tyr	Arg	Val	Val
				165				170						175	
Ala	His	Ser	Ser	Val	Phe	Arg	Val	Leu	Arg	Arg	Pro	Gln	Glu	Phe	Val
			180					185					190		
Asn	Arg	Thr	Pro	Glu	Thr	Val	Phe	Ile	Phe	Trp	Gly	Pro	Pro	Ser	Lys
		195				200						205			
Met	Gln	Lys	Pro	Gln	Gly	Ser	Leu	Val	Arg	Val	Ile	Gln	Arg	Ala	Gly
	210				215							220			
Leu	Val	Phe	Pro	Asn	Met	Glu	Ala	Tyr	Ala	Val	Ser	Pro	Gly	Arg	Met
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Val	Glu	Leu	Cys	Asp	His	Val	His	Val	Tyr	Gly	Met	Val	Pro	Pro	Asn
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 <211> 690
 <212> DNA
 <213> Homo sapiens

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 35 40 45
 Thr Glu His Ala Asp Pro Leu Pro Phe Pro Ser Val Ser Leu Ser Gly
 50 55 60
 Phe Thr Val Gly Thr Leu Ser Glu Thr Ser Thr Gly Gly Pro Ala Thr
 65 70 75 80
 Pro Thr Trp Lys Glu Cys Pro Ile Cys Lys Glu Arg Phe Pro Ala Glu
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<210> 3297

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<212> DNA

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<213> Homo sapiens

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Ser Ile Gln Gln Phe Thr Glu Met Asn Leu Leu Ser Asp Tyr Arg Phe			
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Leu Glu Asp Val Ala Arg Thr Ala Asp His Ile Ser Arg Asp Ala Phe			
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Leu Lys Arg Pro Ile Ser Asn Lys Tyr Met Tyr Phe Met Lys Asn Arg			
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Ala Arg Ser Lys Gly Ile Asn Leu Lys Leu Leu Pro Asn Gly Phe Thr			
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Lys Arg Lys Glu Asn Ser Thr Phe Phe Asp Lys Lys Lys Gln Gln Phe			
115	120	125	
Cys Trp His Val Lys Leu Gln Phe Pro Gln Ser Gln Ala Glu Tyr Ile			
130	135	140	
Glu Lys Arg Val Pro Asp Asp Lys Thr Ile Asn Glu Ile Leu Lys Pro			
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Tyr Ile Asp Pro Glu Lys Ser Asp Pro Val Ile Arg Gln Arg Leu Lys			
165	170	175	
Ala Tyr Ile Arg Ser Gln Thr Gly Val Gln Ile Leu Met Lys Ile Glu			
180	185	190	
Tyr Met Gln Gln Asn Leu Val Arg Tyr Tyr Glu Leu Asp Pro Tyr Lys			
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<211> 2109

<212> DNA

<213> Homo sapiens

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Ile Asp Ile Phe Pro Val Thr Asn Lys Asp Phe Arg Asp Phe Val Arg
65          70          75          80
Glu Lys Lys Tyr Arg Thr Glu Ala Glu Met Phe Gly Trp Ser Phe Val
          85          90          95
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Pro Thr Cys Gly Arg Glu Ser Ser Pro Arg Glu Thr Lys Leu Arg Met
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145         150         155         160
Tyr Gly Leu Tyr Asp Leu Leu Gly Asn Val Trp Glu Trp Thr Ala Ser
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Pro Tyr Gln Ala Ala Glu Gln Asp Met Arg Val Leu Arg Gly His Pro
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Gly Ser Thr Gln Leu Met Ala Leu Pro Ile Thr Gly Pro Gly Ser Pro
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Ala Val Leu Gln Thr Gln Ala Gly Arg Gln Gly Ser Cys Lys Gln Pro
225         230         235         240
Gly Gly Asp Lys Glu Lys Ser Leu Leu Gly Ser Leu Ser Phe Pro Gly
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His Val Ala Asn Ser Ala Ile Pro Ser Ser Arg Ala Ser Ala Ser Gly
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Lys Asn Phe Pro Phe Pro Val Ser His Pro Ser Val Ala Gly Ala Ser
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His Gln Gly Arg Arg Gly Leu Ser Leu Leu Cys Phe Gly Glu Gly Ala
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<400> 3303

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<211> 233

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<213> Homo sapiens

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Val	Ala	Glu	Glu	Ala	Ala	Asp	Leu	Asp	Gly	Glu	Ile	Asp	Leu	Ser	Ala
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Cys	Tyr	Asp	Val	Thr	Glu	Tyr	Pro	Val	Gln	Arg	Asn	Tyr	Gly	Phe	Gln
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Ile	His	Thr	Lys	Glu	Gly	Glu	Phe	Thr	Leu	Ser	Ala	Met	Thr	Ser	Gly
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	130					135					140				
Thr	Ala	Pro	Asp	Val	Thr	Ser	Ser	Leu	Pro	Glu	Glu	Lys	Asn	Lys	Ser
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<212> DNA

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<210> 3306

<211> 319
 <212> PRT
 <213> Homo sapiens

<400> 3306

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Trp His Pro Thr Leu Asn Leu Pro Leu Ser Pro Gln Gly Thr Val Arg
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Thr Ala Val Glu Phe Gln Val Met Thr Gln Thr Gln Ser Leu Ser Phe
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Leu Leu Gly Ser Ser Ala Ser Leu Asp Cys Gly Phe Ser Met Ala Pro
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Gly Leu Asp Leu Ile Ser Val Glu Trp Arg Leu Gln His Lys Gly Arg
 100          105          110
Gly Gln Leu Val Tyr Ser Trp Thr Ala Gly Gln Gly Gln Ala Val Arg
 115          120          125
Lys Gly Ala Thr Leu Xaa Ala Cys Thr Thr Gly His Gly Xaa Arg Asp
 130          135          140
Ala Ser Leu Thr Leu Pro Gly Leu Thr Ile Gln Asp Glu Gly Thr Tyr
 145          150          155          160
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 165          170          175
Leu Asn Ile Gln Ala Ser Pro Lys Val Arg Leu Ser Leu Ala Asn Glu
 180          185          190
Ala Leu Leu Pro Thr Leu Ile Cys Asp Ile Ala Gly Tyr Tyr Pro Leu
 195          200          205
Asp Val Val Val Thr Trp Thr Arg Glu Glu Leu Gly Gly Ser Pro Ala
 210          215          220
Gln Val Ser Gly Ala Ser Phe Ser Ser Leu Arg Gln Ser Val Ala Gly
 225          230          235          240
Thr Tyr Ser Ile Ser Ser Ser Leu Thr Ala Glu Pro Gly Leu Cys Arg
 245          250          255
Cys His Leu His Leu Pro Gly His Thr His Leu Ser Gly Gly Ala Pro
 260          265          270
Trp Gly Gln His Pro Gly Cys Pro Thr Arg Ala Glu Asn Ser Leu Gly
 275          280          285
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<210> 3307
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 <212> DNA
 <213> Homo sapiens

<400> 3307

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<210> 3308

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3308

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			20					25					30		
Pro	Arg	Trp	Glu	Pro	Cys	Leu	Gly	Gln	Gly	Gly	Arg	Val	Asp	Gly	Ser
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Trp	Asp	Cys	Asp	Ile	Gly	Arg	Arg	Gly	Arg	Ser	Pro	Ala	Leu	Ser	Ser
	50					55					60				
Ala	Gly	Trp	Ala	Gly	Ile	His	Leu	Ala	Ala	Ser	Gln	Gly	Leu	Cys	Pro
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Ala	Gly	Trp	Ser	Leu	Cys	Cys	Pro	Asn	Gln	Val	Ser	Thr	Phe	Pro	Ala
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<210> 3309

<211> 737

<212> DNA

<213> Homo sapiens

<400> 3309

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 <212> PRT
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 20 25 30
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 35 40 45
 Gln Thr His Pro Asp Val Pro Val Gly Asp Glu Ser Gln Ala Arg Val
 50 55 60
 Leu His Met Val Gly Asp Lys Pro Val Phe Ser Phe Gln Pro Arg Gly
 65 70 75 80
 His Leu Glu Ile Gly Glu Lys Leu Asp Ile Ile Arg Gln Lys Arg Leu
 85 90 95
 Ser His Val Ser Gly His Arg Ser Tyr Tyr Leu Arg Gly Ala Gly Ala
 100 105 110
 Leu Leu Gln His Gly Leu Val Asn Phe Thr Phe Asn Lys Leu Leu Arg
 115 120 125
 Arg Gly Phe Thr Pro Met Thr Val Pro Asp Leu Leu Arg Gly Ala Val
 130 135 140
 Phe Glu Gly Cys Gly Met Thr Pro Asn Ala Asn Pro Ser Gln Ile Tyr
 145 150 155 160
 Asn Ile Asp Pro Ala Arg Phe Lys Asp Leu Asn Leu Ala Gly Thr Ala
 165 170 175
 Glu Val Gly Leu Ala Gly Tyr Phe Met Asp His Thr Val Ala Phe Arg
 180 185 190
 Asp Leu Pro Val Arg Met Val Cys Ser Ser Thr Cys Tyr Arg Ala Glu
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 Thr Asn
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<210> 3311
 <211> 486
 <212> DNA
 <213> Homo sapiens

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<210> 3312
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 <212> PRT
 <213> Homo sapiens

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 Phe Tyr Glu Asp Cys Thr Ala Ser Ile Trp Glu Tyr Glu Asp Asp Phe
 35 40 45
 Gln Ile Gln Arg Ser Pro Asn Arg Trp Ser Ser Val Phe Trp Lys Val
 50 55 60
 Gly Leu Ile Ser Gly Thr Val Phe Val Ile Leu Gly Leu Thr Val Leu
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<210> 3313
 <211> 1791
 <212> DNA
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<210> 3314

<211> 537

<212> PRT

<213> Homo sapiens

<400> 3314

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His Lys Val Ser Val Ser Pro Val Val His Val Arg Gly Leu Cys Glu
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Ser Val Val Glu Ala Asp Leu Val Glu Ala Leu Glu Lys Phe Gly Thr
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Ile Cys Tyr Val Met Met Met Pro Phe Lys Arg Gln Ala Leu Val Glu
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Phe Glu Asn Ile Asp Ser Ala Lys Glu Cys Val Thr Phe Ala Ala Asp
115 120 125
Glu Pro Val Tyr Ile Ala Gly Gln Gln Ala Phe Phe Asn Tyr Ser Thr
130 135 140
Ser Lys Arg Ile Thr Arg Pro Gly Asn Thr Asp Asp Pro Ser Gly Gly
145 150 155 160
Asn Lys Val Leu Leu Leu Ser Ile Gln Asn Pro Leu Tyr Pro Ile Thr
165 170 175
Val Asp Val Leu Tyr Thr Val Cys Asn Pro Val Gly Lys Val Gln Arg
180 185 190
Ile Val Ile Phe Lys Arg Asn Gly Ile Gln Ala Met Val Glu Phe Glu
195 200 205
Ser Val Leu Cys Ala Gln Lys Ala Lys Ala Ala Leu Asn Gly Ala Asp
210 215 220
Ile Tyr Ala Gly Cys Cys Thr Leu Lys Ile Glu Tyr Ala Arg Pro Thr
225 230 235 240
Arg Leu Asn Val Ile Arg Asn Asp Asn Asp Ser Trp Asp Tyr Thr Lys
245 250 255
Pro Tyr Leu Gly Arg Arg Asp Arg Gly Lys Gly Arg Gln Arg Gln Ala
260 265 270
Ile Leu Gly Glu His Pro Ser Ser Phe Arg His Asp Gly Tyr Gly Ser
275 280 285
His Gly Pro Leu Leu Pro Leu Pro Ser Arg Tyr Arg Met Gly Ser Arg
290 295 300
Asp Thr Pro Glu Leu Val Ala Tyr Pro Leu Pro Gln Ala Ser Ser Ser
305 310 315 320
Tyr Met His Gly Gly Asn Pro Ser Gly Ser Val Val Met Val Ser Gly
325 330 335
Leu His Gln Leu Lys Met Asn Cys Ser Arg Val Phe Asn Leu Phe Cys
340 345 350
Leu Tyr Gly Asn Ile Glu Lys Val Lys Phe Met Lys Thr Ile Pro Gly
355 360 365
Thr Ala Leu Val Glu Met Gly Asp Glu Tyr Ala Val Glu Arg Ala Val
370 375 380
Thr His Leu Asn Asn Val Lys Leu Phe Gly Lys Arg Leu Asn Val Cys
385 390 395 400
Val Ser Lys Gln His Ser Val Val Pro Ser Gln Ile Phe Glu Leu Glu

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		435					440					445							
Cys	Val	Leu	His	Tyr	Tyr	Asn	Val	Pro	Leu	Cys	Val	Thr	Glu	Glu	Thr				
	450					455					460								
Phe	Thr	Lys	Leu	Cys	Asn	Asp	His	Glu	Val	Leu	Thr	Phe	Ile	Lys	Tyr				
465					470					475					480				
Lys	Val	Phe	Asp	Ala	Lys	Pro	Ser	Ala	Lys	Thr	Leu	Ser	Gly	Leu	Leu				
			485					490						495					
Glu	Trp	Glu	Cys	Lys	Thr	Asp	Ala	Val	Glu	Ala	Leu	Thr	Ala	Leu	Asn				
			500					505					510						
His	Tyr	Gln	Ile	Arg	Val	Pro	Asn	Gly	Ser	Asn	Pro	Tyr	Thr	Leu	Lys				
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<210> 3315

<211> 934

<212> DNA

<213> Homo sapiens

<400> 3315

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<210> 3316

<211> 187

<212> PRT

<213> Homo sapiens

<400> 3316

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			20					25					30		
Val	Pro	Lys	Thr	Ser	Leu	Ser	Ser	Pro	Pro	Trp	Pro	Glu	Val	Val	Leu
		35					40					45			
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	50					55					60				
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Val	His	Phe	Ala	Ser	Arg	Gln	Trp	Lys	Val	Thr	Ser	Glu	Asp	Leu	Ile
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Lys	Thr	Glu	Ser	Trp	Pro	Arg	Ile	Ile	Met	Arg	Phe	Arg	Lys	Arg	Lys
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Asn	Phe	Lys	Lys	Lys	Arg	Ile	Val	Thr	Thr	Pro	Gln	Thr	Val	Leu	Arg
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<210> 3317

<211> 1665

<212> DNA

<213> Homo sapiens

<400> 3317

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420

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<211> 253

<212> PRT

<213> Homo sapiens

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Lys Glu Thr Asp Lys Gln Lys Lys Ile Ala Glu Lys Glu Val Arg Ile		
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Lys Leu Leu Lys Lys Pro Glu Lys Gly Glu Glu Pro Thr Thr Glu Lys		
85	90	95
Pro Lys Glu Arg Gly Glu Glu Ile Asp Thr Gly Gly Gly Lys Gln Glu		
100	105	110
Ser Cys Ala Pro Gly Ala Val Val Lys Ala Arg Pro Met Glu Gly Ser		
115	120	125
Leu Glu Glu Pro Gln Glu Thr Ser His Ser Gly Ser Asp Lys Glu His		
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Arg Asp Val Glu Arg Ser Gln Glu Gln Glu Ser Glu Ala Gln Arg Tyr		
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His Val Asp Asp Gly Arg Arg His Arg Ala His His Glu Pro Glu Arg		
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Leu Ser Arg Arg Ser Glu Asp Glu Gln Arg Trp Gly Lys Gly Pro Gly		
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Gln Asp Arg Gly Lys Lys Gly Ser Gln Asp Ser Gly Ala Pro Gly Glu		
195	200	205
Ala Met Glu Arg Leu Gly Arg Ala Gln Arg Cys Asp Asp Ser Pro Ala		
210	215	220
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<210> 3319

<211> 1541

<212> DNA

<213> Homo sapiens

<400> 3319

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<211> 256

<212> PRT

<213> Homo sapiens

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<210> 3321
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<211> 454

<212> PRT

<213> Homo sapiens

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			20					25					30		
Thr	Pro	Thr	Ser	Val	Ile	Gln	Val	Thr	Asn	Leu	Ser	Ser	Ala	Val	Thr
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His	Leu	Thr	Asn	Thr	Val	Phe	Ile	Asp	Arg	Ala	Leu	Ile	Val	Val	Pro
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Ala	Pro	Ala	Pro	Thr	Met	Thr	Ser	Leu	Met	Pro	Gly	Ala	Gly	Leu	Leu
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<212> DNA

<213> Homo sapiens

<400> 3323

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<213> Homo sapiens

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			20					25					30		
Thr	Thr	Val	Ile	Pro	Arg	Val	Tyr	Thr	Tyr	Tyr	Val	Ser	Thr	Val	Leu
		35				40					45				
Phe	Ala	Ile	Phe	Gly	Ile	Arg	Met	Leu	Arg	Glu	Gly	Leu	Lys	Met	Ser
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Pro	Asp	Glu	Gly	Gln	Glu	Leu	Glu	Glu	Val	Gln	Ala	Glu	Leu	Lys	
65				70					75				80		
Lys	Lys	Asp	Glu	Glu	Val	Ser	His	Gly	Thr	Val	Asp	Leu	Asp	Gln	Lys
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<210> 3326

<211> 254

<212> PRT

<213> Homo sapiens

<400> 3326

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			20					25					30		
Gln	Arg	Ser	Met	Ala	Val	Ser	Gln	Pro	Asn	Leu	Val	Met	Asn	His	Gln
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Thr	Gln	Asn	Pro	Pro	Ala	Gly	Leu	Met	Ser	Met	Pro	Asn	Ala	Leu	Thr
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Thr	Gln	Gln	Gln	Gln	Gln	Gln	Lys	Leu	Arg	Leu	Gln	Arg	Ile	Gln	Met
				85				90						95	
Glu	Arg	Glu	Arg	Ile	Arg	Met	Arg	Gln	Glu	Glu	Leu	Met	Arg	Gln	Glu
		100						105					110		
Ala	Ala	Leu	Cys	Arg	Gln	Leu	Pro	Met	Glu	Ala	Glu	Thr	Leu	Ala	Pro
		115					120					125			
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Ser	Arg	Glu	Gln	Ser	Thr	Asp	Ser	Gly	Leu	Gly	Leu	Gly	Cys	Tyr	Ser
				165				170						175	
Val	Pro	Thr	Thr	Pro	Glu	Asp	Phe	Leu	Ser	Asn	Val	Asp	Glu	Met	Asp
		180					185						190		
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	195					200						205			
Thr	Arg	Phe	Pro	Asp	Phe	Leu	Asp	Cys	Leu	Pro	Gly	Thr	Asn	Val	Asp
	210					215					220				
Leu	Gly	Thr	Leu	Glu	Ser	Glu	Asp	Leu	Ile	Pro	Leu	Phe	Asn	Asp	Val
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<210> 3327

<211> 2263

<212> DNA

<213> Homo sapiens

<400> 3327

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<211> 521

<212> PRT

<213> Homo sapiens

<400> 3328

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			20					25					30		
His	Trp	Ser	Asp	Ser	Arg	Tyr	Glu	His	Val	Met	Lys	Leu	Arg	Gln	Ala
		35					40					45			
Ala	Leu	Lys	Ser	Ala	Arg	Asp	Met	Trp	Ala	Asp	Tyr	Ile	Leu	Phe	Val
	50					55					60				
Asp	Ala	Asp	Asn	Leu	Ile	Leu	Asn	Pro	Asp	Thr	Leu	Ser	Leu	Leu	Ile
65				70					75					80	
Ala	Glu	Asn	Lys	Thr	Val	Val	Ala	Pro	Met	Leu	Asp	Ser	Arg	Ala	Ala
			85					90					95		
Tyr	Ser	Asn	Phe	Trp	Cys	Gly	Met	Thr	Ser	Gln	Gly	Tyr	Tyr	Lys	Arg
		100						105					110		
Thr	Pro	Ala	Tyr	Ile	Pro	Ile	Arg	Lys	Arg	Asp	Arg	Arg	Gly	Cys	Phe
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Ala	Val	Pro	Met	Val	His	Ser	Thr	Phe	Leu	Ile	Asp	Leu	Arg	Lys	Ala
		130				135					140				
Ala	Ser	Arg	Asn	Leu	Ala	Phe	Tyr	Pro	Pro	His	Pro	Asp	Tyr	Thr	Trp
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Ser	Phe	Asp	Asp	Ile	Ile	Val	Phe	Ala	Phe	Ser	Cys	Lys	Gln	Ala	Glu
			165					170					175		
Val	Gln	Met	Tyr	Val	Cys	Asn	Lys	Glu	Glu	Tyr	Gly	Phe	Leu	Pro	Val
		180					185					190			
Pro	Leu	Arg	Ala	His	Ser	Thr	Leu	Gln	Asp	Glu	Ala	Glu	Ser	Phe	Met
		195				200						205			
His	Val	Gln	Leu	Glu	Val	Met	Val	Lys	His	Pro	Pro	Ala	Glu	Pro	Ser
	210					215					220				
Arg	Phe	Ile	Ser	Ala	Pro	Thr	Lys	Thr	Pro	Asp	Lys	Met	Gly	Phe	Asp
225				230						235				240	
Glu	Val	Phe	Met	Ile	Asn	Leu	Arg	Arg	Arg	Gln	Asp	Arg	Arg	Glu	Arg
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 Thr Lys Gly Glu Leu Gly Cys Phe Leu Ser His Tyr Asn Ile Trp Lys
 305 310 315 320
 Glu Val Val Asp Arg Gly Leu Gln Lys Ser Leu Val Phe Glu Asp Asp
 325 330 335
 Leu Arg Phe Glu Ile Phe Phe Lys Arg Arg Leu Met Asn Leu Met Arg
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 Asp Val Glu Arg Glu Gly Leu Asp Trp Asp Leu Ile Tyr Val Gly Arg
 355 360 365
 Lys Arg Met Gln Val Glu His Pro Glu Lys Ala Val Pro Arg Val Arg
 370 375 380
 Asn Leu Val Glu Ala Asp Tyr Ser Tyr Trp Thr Leu Ala Tyr Val Ile
 385 390 395 400
 Ser Leu Gln Gly Ala Arg Lys Leu Leu Ala Ala Glu Pro Leu Ser Lys
 405 410 415
 Met Leu Pro Val Asp Glu Phe Leu Pro Val Met Phe Asp Lys His Pro
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 Val Ser Glu Tyr Lys Ala His Phe Ser Leu Arg Asn Leu His Ala Phe
 435 440 445
 Ser Val Glu Pro Leu Leu Ile Tyr Pro Thr His Tyr Thr Gly Asp Asp
 450 455 460
 Gly Tyr Val Ser Asp Thr Glu Thr Ser Val Val Trp Asn Asn Glu His
 465 470 475 480
 Val Lys Thr Asp Trp Asp Arg Ala Lys Ser Gln Lys Met Arg Glu Gln
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 <212> DNA
 <213> Homo sapiens

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<211> 235

<212> PRT

<213> Homo sapiens

<400> 3330

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			20					25					30		
Asn	Ser	Thr	Phe	Ala	Trp	Phe	Trp	Asn	Asp	Arg	Arg	Leu	His	Ala	Glu
		35					40					45			
Pro	Val	Pro	Thr	Leu	Ala	Phe	Thr	His	Val	Ala	Arg	Ala	Gln	Ala	Gly
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Pro	Val	Met	Leu	Arg	Val	Leu	Tyr	Pro	Pro	Lys	Thr	Pro	Thr	Met	Met
				85					90					95	
Val	Phe	Val	Glu	Pro	Glu	Gly	Gly	Leu	Arg	Gly	Ile	Leu	Asp	Cys	Arg
			100					105					110		
Val	Asp	Ser	Glu	Pro	Leu	Ala	Ser	Leu	Thr	Leu	His	Leu	Gly	Ser	Arg
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						135					140				
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Arg	Pro	Ser	Asp	Gln	Gly	Glu	Tyr	Ile	Cys	Ser	Ala	Ser	Asn	Val	Leu
			165						170					175	
Gly	Ser	Ala	Ser	Thr	Ser	Thr	Tyr	Phe	Gly	Val	Arg	Ala	Leu	His	Arg
			180					185					190		
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<211> 1644

<212> DNA

<213> Homo sapiens

<400> 3331

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35 40 45
Met Ser Ser Cys Arg Val Asp Lys Pro Ser Glu Ile Val Asp Val Gly
50 55 60
Asp Lys Val Trp Val Lys Leu Ile Gly Arg Glu Met Lys Asn Asp Arg
65 70 75 80
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<210> 3333
<211> 2422
<212> DNA
<213> Homo sapiens

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2280

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 <211> 672
 <212> PRT
 <213> Homo sapiens

<400> 3334

Leu	Glu	Phe	Asp	Gln	Gln	Gln	Gly	Ser	Val	Cys	Pro	Ser	Glu	Ser	Glu
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Ile	Tyr	Glu	Ala	Gly	Ala	Gly	Asp	Arg	Met	Ala	Gly	Ala	Pro	Met	Ala
			20				25					30			
Ala	Ala	Val	Gln	Pro	Ala	Glu	Val	Thr	Val	Glu	Val	Gly	Glu	Asp	Leu
		35				40						45			
His	Met	His	His	Val	Arg	Asp	Arg	Glu	Met	Pro	Glu	Ala	Leu	Glu	Phe
	50					55				60					
Asn	Leu	Ser	Ala	Asn	Pro	Glu	Ser	Ser	Thr	Ile	Phe	Gln	Arg	Asn	Ser
65					70					75				80	
Gln	Thr	Glu	Ala	Leu	Glu	Phe	Asn	Pro	Ser	Ala	Asn	Pro	Glu	Ala	Ser
			85					90					95		
Thr	Ile	Phe	Gln	Arg	Asn	Ser	Gln	Thr	Asp	Val	Val	Glu	Ile	Arg	Arg
			100				105					110			
Ser	Asn	Cys	Thr	Asn	His	Val	Ser	Ala	Val	Arg	Phe	Ser	Gln	Gln	Tyr
		115					120				125				
Ser	Leu	Cys	Ser	Thr	Ile	Phe	Leu	Asp	Asp	Ser	Thr	Ala	Ile	Gln	His
	130					135				140					
Tyr	Leu	Thr	Met	Thr	Ile	Ile	Ser	Val	Thr	Leu	Glu	Ile	Pro	His	His
145					150					155				160	
Ile	Thr	Gln	Arg	Asp	Ala	Asp	Arg	Thr	Leu	Ser	Ile	Pro	Asp	Glu	Gln
			165					170					175		
Leu	His	Ser	Phe	Ala	Val	Ser	Thr	Val	His	Ile	Met	Lys	Lys	Arg	Asn
		180					185					190			
Gly	Gly	Gly	Ser	Leu	Asn	Asn	Tyr	Ser	Ser	Ser	Ile	Pro	Ser	Thr	Pro
		195					200					205			
Ser	Thr	Ser	Gln	Glu	Asp	Pro	Gln	Phe	Ser	Val	Pro	Pro	Thr	Ala	Asn
	210					215					220				
Thr	Pro	Thr	Pro	Val	Cys	Lys	Arg	Ser	Met	Arg	Trp	Ser	Asn	Leu	Phe
225					230					235				240	
Thr	Ser	Glu	Lys	Gly	Ser	His	Pro	Asp	Lys	Glu	Arg	Lys	Ala	Pro	Glu
			245					250					255		
Asn	His	Ala	Asp	Thr	Ile	Gly	Ser	Gly	Arg	Ala	Ile	Pro	Ile	Lys	Gln
		260				265						270			
Gly	Met	Leu	Leu	Lys	Arg	Ser	Gly	Lys	Trp	Leu	Lys	Thr	Trp	Lys	Lys
	275					280						285			
Lys	Tyr	Val	Thr	Leu	Cys	Ser	Asn	Gly	Met	Leu	Thr	Tyr	Tyr	Ser	Ser
	290					295					300				
Leu	Gly	Asp	Tyr	Met	Lys	Asn	Ile	His	Lys	Lys	Glu	Ile	Asp	Leu	Gln
305					310					315				320	
Thr	Ser	Thr	Ile	Lys	Val	Pro	Gly	Lys	Trp	Pro	Ser	Leu	Ala	Thr	Ser

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<400> 3335
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120
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cccagactgc ttgttgaagg ggttgagggtg ggcctgccgg aaacggggcca gcttctcatc
 180
 atattccata gcatcccacc tgcacgcct gccagggccc aggggctcgc agggacagga
 240
 tggccattcc tctagggctg ctggccacgg aagcctggcc gtgggttcgg cacctgctga
 300
 ccgcccctc gcatttgccc tgagacaggg ctggacagcc aggattaccg ctgtgccgag
 360
 tgccggggcg ccattctctt gcgggggtgtg cccagtggag ccaggcagtg cgactacacc
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<210> 3336

<211> 59

<212> PRT

<213> Homo sapiens

<400> 3336

Pro	Pro	Pro	Arg	Ile	Cys	Pro	Glu	Thr	Gly	Leu	Asp	Ser	Gln	Asp	Tyr
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Arg	Cys	Ala	Glu	Cys	Arg	Ala	Pro	Ile	Ser	Leu	Arg	Gly	Val	Pro	Ser
			20					25					30		
Glu	Ala	Arg	Gln	Cys	Asp	Tyr	Thr	Gly	Gln	Tyr	Tyr	Cys	Ser	Pro	Cys
			35				40					45			
His	Trp	Asn	Ala	Leu	Ala	Val	Ile	Pro	Ala	Arg					
	50						55								

<210> 3337

<211> 679

<212> DNA

<213> Homo sapiens

<400> 3337

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 120
 agcttagcct ccaaagacac agatagagtg agagagagag acagagagag acacagagac
 180
 agacagagac caaaacagaa gcggcaaacy gcaaaaacga agcagaatca atgcaagtta
 240
 gagaaaaaaaa taaaactaaa catcagagca gggaaaagtc atctactccg tatcacacct
 300
 gtgtattagc ttaaccagaa ataagctgga agaggagttc agtagcctct cagcccccta
 360
 aagatgttgg tcataccccc tctttcaccg tctgagtcga gaggacacca agccaaacaa
 420
 actgtgcccc aaactgggtc atctagtcct cccaggtect tccttgctaa ctcgaggaaa
 480
 caaggaaaac caactttgga tggcaacttc aacaaggtaa ccctcctttc ttcaatggcc
 540
 agactgatgc ccaactgaaa tggctttgag atgcttggac agcagactgt catgtcaaga
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ctgcccagac cccaccaca ctgtggaaaa gggcagcacc agaccactg gagatgaggc
 660
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 679

<210> 3338
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 3338
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 Lys Lys Gly Lys Lys Lys Arg Lys Arg Asp Thr Pro Gln Arg Gly Gly
 20 25 30
 Lys Glu Val Arg Trp Gly Ser Leu Ser Leu Ala Ser Lys Asp Thr Asp
 35 40 45
 Arg Val Arg Glu Arg Asp Arg Glu Arg His Arg Asp Arg Gln Arg Pro
 50 55 60
 Lys Gln Lys Arg Gln Thr Ala Lys Thr Lys Gln Asn Gln Cys Lys Leu
 65 70 75 80
 Glu Lys Lys Ile Lys Leu Asn Ile Arg Ala Gly Lys Ser His Leu Leu
 85 90 95
 Arg Ile Thr Pro Val Tyr
 100

<210> 3339
 <211> 1341
 <212> DNA
 <213> Homo sapiens

<400> 3339
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 120
 agaagccagt tccatccagg atccactatc tacacaccta tggtacaaca ttatatcaaa
 180
 tctggtatct gaagaaaaga tacacattta atatgttcat ttaagttacg tattttgcag
 240
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 300
 ctcagatcca cctggaatga ctaaagaatg gaagttctgt atccacctgt gttaaaactg
 360
 gtaaagttaa tgatatctgt taccaataaa acgcattcgt ttattcaatg taagtaagtt
 420
 atctaatttt aacaatatgg caccctaaaa accaactgta tttttatgat gaggcacttt
 480
 tgtagtgat gaaacaaaaa gaacaaattt gctgcacact gatgccagcg attttcttca
 540
 gtgatttttg gtatatgcta tgtagtaagt tgcaacaaat accttgctca tttgtataca
 600
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 660

ctgtaaagct atttcacagt gcaaaatgat gaaaccagcc caaatgaagg ctgcataata
 720
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 1020
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 1140
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 1341

<210> 3340

<211> 86

<212> PRT

<213> Homo sapiens

<400> 3340

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Ser	Val	Asn	Ile	Phe	Leu	Tyr	Gln	Asn	Cys	Tyr	Tyr	Ala	Ala	Phe	Ile
		20						25				30			
Trp	Ala	Gly	Phe	Ile	Ile	Leu	His	Cys	Glu	Ile	Ala	Leu	Gln	Cys	Ile
		35					40					45			
Thr	Thr	Ala	Arg	Arg	Thr	Tyr	Ile	Tyr	Ile	Tyr	Ile	Lys	Asn	Ile	Ser
		50				55					60				
Asp	Ser	Cys	Ile	Gln	Met	Ser	Lys	Val	Phe	Val	Ala	Thr	Tyr	Tyr	Ile
65					70				75					80	
Ala	Tyr	Thr	Gln	Asn	His										
				85											

<210> 3341

<211> 1132

<212> DNA

<213> Homo sapiens

<400> 3341

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 120

ctggagcatg accacagacc cattcagga ggctggcgga ctcttcatcc tggacagtcc
 180
 cttactgtat gtcaagtaaa gctgagaatg aagcggagag catcagacag aggagctggg
 240
 gaaacgtcgg ccagggccaa ggctctagga agtgggattt ctggaaataa tgcaaagaga
 300
 gctggaccat tcataccttg tccccgtctg ggcaactcac cggtgccaaag catagtgcag
 360
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 420
 gagagggggg accaaggcat agagagccag gaagagcggc agggcaagat gctgctgcac
 480
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 540
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 600
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 660
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 720
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 780
 aatatacgtg acagagacct gaagctgggg aacatgggtg tcaacaagag gacacatcgg
 840
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 1020
 ttccccttct acgacagcat cccgcaggag ctcttccgca agatcaaggc tgccgagtat
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 1132

<210> 3342

<211> 308

<212> PRT

<213> Homo sapiens

<400> 3342

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Ala	Lys	Ala	Leu	Gly	Ser	Gly	Ile	Ser	Gly	Asn	Asn	Ala	Lys	Arg	Ala
		20						25					30		
Gly	Pro	Phe	Ile	Leu	Gly	Pro	Arg	Leu	Gly	Asn	Ser	Pro	Val	Pro	Ser
	35					40					45				
Ile	Val	Gln	Cys	Leu	Ala	Arg	Lys	Asp	Gly	Thr	Asp	Phe	Tyr	Gln	
	50					55				60					
Leu	Lys	Ile	Leu	Thr	Leu	Glu	Glu	Arg	Gly	Asp	Gln	Gly	Ile	Glu	Ser
65				70					75					80	
Gln	Glu	Glu	Arg	Gln	Gly	Lys	Met	Leu	Leu	His	Thr	Glu	Tyr	Ser	Leu
			85					90						95	
Leu	Ser	Leu	Leu	His	Thr	Gln	Asp	Gly	Val	Val	His	His	His	Gly	Leu


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<210> 3343
<211> 594
<212> DNA
<213> Homo sapiens
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120
ttcagcatga actgggtcgt gggcagcgcg gacctggaga ttatcaacgc caccactggg
180
cggaggagct gtggggggccc atcccggctc tgcaagcacg tgctgtctgc acggtgggcg
240
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420
ctgactctct aggctgcggg ctcttggtg ctggagctga gcgggacgct ggagggatgg
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594
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<210> 3344
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 3344
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 Arg Gln Pro Gly Lys Ser Pro Pro Phe Ser Met Asn Trp Val Val Gly
 35 40 45
 Ser Ala Asp Leu Glu Ile Ile Asn Ala Thr Thr Gly Arg Arg Ser Cys
 50 55 60
 Gly Gly Pro Ser Arg Leu Cys Lys His Val Leu Ser Ala Arg Trp Ala
 65 70 75 80
 Arg Leu Tyr Gly Arg Leu Ser Thr Arg Thr Pro Ser Pro Gly Asp Thr
 85 90 95
 Pro Ser Met Tyr Cys Glu Ala Lys Leu Gly Ala His Thr Tyr Gln Ser
 100 105 110
 Val Lys Gln Gln Leu Phe Lys Ala Phe Gln Lys Ala Gly Leu Gly Thr
 115 120 125
 Trp Val Arg Lys Pro Pro Glu Gln Gln Gln Phe Leu Leu Thr Leu
 130 135 140

<210> 3345
 <211> 1149
 <212> DNA
 <213> Homo sapiens

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<210> 3346

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3346

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Pro	Phe	Asn	Lys	Gln	Ser	Gly	Pro	Arg	Gln	His	Glu	Gln	Gly	Pro	Gly
			20					25					30		
Glu	Glu	Val	Pro	Asp	Val	Thr	Pro	Glu	Glu	Ala	Leu	Pro	Glu	Leu	Pro
		35					40					45			
Pro	Gly	Glu	Pro	Glu	Phe	Arg	Cys	Pro	Glu	Arg	Val	Met	Asp	Leu	Gly
	50					55					60				
Leu	Ser	Glu	Asp	His	Phe	Ser	Arg	Pro	Val	Gly	Leu	Phe	Leu	Ala	Ser
65					70					75					80
Asp	Val	Gln	Gln	Leu	Arg	Gln	Ala	Ile	Glu	Glu	Cys	Lys	Gln	Val	Ile
				85					90					95	
Leu	Glu	Leu	Pro	Glu	Gln	Ser	Glu	Lys	Gln	Lys	Asp	Ala	Val	Val	Arg
			100					105					110		
Leu	Ile	His	Leu	Arg	Leu	Lys	Leu	Gln	Glu	Leu	Lys	Asp	Pro	Asn	Glu
		115					120					125			
Asp	Glu	Pro	Asn	Ile	Arg	Val	Leu	Leu	Glu	His	Arg	Phe	Tyr	Lys	Glu
	130					135					140				
Lys	Ser	Lys	Ser	Val	Lys	Gln	Thr	Cys	Asp	Lys	Cys	Asn	Thr	Ile	Ile
145					150					155					160
Trp	Gly	Leu	Ile	Gln	Thr	Trp	Tyr	Thr	Cys	Thr	Gly	Cys	Tyr	Tyr	Arg
			165					170						175	
Cys	His	Ser	Lys	Cys	Leu	Asn	Leu	Ile	Ser	Lys	Pro	Cys	Val	Ser	Ser
			180				185						190		
Lys	Val	Ser	His	Gln	Ala	Glu	Tyr	Glu	Leu	Asn	Ile	Cys	Pro	Glu	Thr
		195					200					205			
Gly	Leu	Asp	Ser	Gln	Asp	Tyr	Arg	Cys	Ala	Glu	Cys	Arg	Ala	Pro	Ile
	210					215					220				
Ser	Leu	Arg	Gly	Val	Pro	Ser	Glu	Ala	Arg	Gln	Cys	Asp	Tyr	Thr	Gly

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Glu Ala Gly Val Cys Ser Arg						
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<210> 3347

<211> 2267

<212> DNA

<213> Homo sapiens

<400> 3347

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240
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1260

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 2040
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 <210> 3348
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 <212> PRT
 <213> Homo sapiens

<400> 3348
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 35 40 45
 Leu Pro Gly Pro Thr Leu Ala Phe Leu Val Leu Ser Thr Pro Ala Met
 50 55 60
 Phe Asp Arg Ala Leu Lys Pro Phe Leu Gln Ser Cys His Leu Arg Met
 65 70 75 80
 Leu Thr Asp Pro Val Asp Gln Cys Val Ala Tyr His Leu Gly Arg Val
 85 90 95
 Gly Glu Ser Leu Pro Glu Leu Gln Ile Glu Ile Ile Ala Asp Tyr Glu
 100 105 110

Val His Pro Asn Arg Arg Pro Lys Ile Leu Ala Gln Thr Ala Ala His
 115 120 125
 Val Ala Gly Ala Ala Tyr Tyr Gln Arg Gln Asp Val Glu Ala Asp
 130 135 140
 Pro Trp Gly Asn Gln Arg Ile Ser Gly Val Cys Ile His Pro Arg Phe
 145 150 155 160
 Gly Gly Trp Phe Ala Ile Arg Gly Val Val Leu Leu Pro Gly Ile Glu
 165 170 175
 Val Pro Asp Leu Pro Pro Arg Lys Pro His Asp Cys Val Pro Thr Arg
 180 185 190
 Ala Asp Arg Ile Ala Leu Leu Glu Gly Phe Asn Phe His Trp Arg Asp
 195 200 205
 Trp Thr Tyr Arg Asp Ala Val Thr Pro Gln Glu Arg Tyr Ser Glu Glu
 210 215 220
 Gln Lys Ala Tyr Phe Ser Thr Pro Pro Ala Gln Arg Leu Ala Leu Leu
 225 230 235 240
 Gly Leu Ala Gln Pro Ser Glu Lys Pro Ser Ser Pro Ser Pro Asp Leu
 245 250 255
 Pro Phe Thr Thr Pro Ala Pro Lys Lys Pro Gly Asn Pro Ser Arg Ala
 260 265 270
 Arg Ser Trp Leu Ser Pro Arg Val Ser Pro Pro Ala Ser Pro Gly Pro
 275 280 285

<210> 3349

<211> 1132

<212> DNA

<213> Homo sapiens

<400> 3349

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 480
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 gtcgtgaact ttgagaagcc caagaccaa agatataagt actggtttagc ccagcaagct
 660
 gccaaaggcta tggccccac cagccccag atctaaatct actctccctc caaggcagca
 720

aagcagaatc gggagcagtg gagcagaaat gtgcaagcac cctgatctca ctcccagctc
 780
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 840
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 900
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 960
 tgtttagctt cttcctccat tggagtttat tgggacaaac aggagagcca gccattgtct
 1020
 ccagtacttg cctcattctc atcatccaaa ctgaacattt gtatcccaag cagaaataaa
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 1132

<210> 3350

<211> 174

<212> PRT

<213> Homo sapiens

<400> 3350

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			20					25					30		
Gln	Gly	Leu	Ala	Val	Tyr	Ala	Ser	Pro	Glu	Asn	Lys	Lys	Leu	Phe	Glu
		35					40					45			
Glu	Glu	Lys	Leu	Leu	Arg	Gln	Glu	Gly	Lys	Leu	Glu	Lys	Ile	Gln	Thr
	50					55					60				
Lys	Ala	Gly	Glu	Ala	Thr	Val	Lys	Phe	Leu	Lys	Ser	Cys	Arg	Leu	Glu
65					70				75					80	
Val	Gly	Met	Lys	Asn	Asn	Val	Lys	Trp	Glu	Leu	Asn	Pro	Glu	Ile	Val
			85					90						95	
Ala	Arg	His	Phe	Lys	Asn	Leu	Gly	Val	Val	Val	Ala	Pro	Glu	His	Thr
			100				105						110		
Leu	Lys	Leu	Pro	Ala	Glu	Pro	Ile	Thr	Arg	Trp	Gly	Glu	Tyr	Trp	Cys
		115					120					125			
Glu	Val	Thr	Val	Asn	Gly	Leu	Asp	Thr	Val	Arg	Val	Pro	Met	Ser	Val
	130					135					140				
Val	Asn	Phe	Glu	Lys	Pro	Lys	Thr	Lys	Arg	Tyr	Lys	Tyr	Trp	Leu	Ala
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<210> 3351

<211> 1422

<212> DNA

<213> Homo sapiens

<400> 3351

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 120

atgatgctct tagctccaat aattcatggt ggcaagcaca gtgaacgaca tcctgccctc
 180
 gctgctgcgc cgcgatgcgc tgagcgccgc caaggagggtg ttgtaccacc tggacatcta
 240
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 360
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 480
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 720
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 960
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 1140
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 1200
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 1320
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<210> 3352

<211> 97

<212> PRT

<213> Homo sapiens

<400> 3352

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Ile	His	Gly	Gly	Lys	His	Ser	Glu	Arg	His	Pro	Ala	Leu	Ala	Ala	Ala


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                20                25                30
Pro Arg Cys Ala Glu Arg Arg Gln Gly Gly Val Val Pro Gly His
      35                40                45
Leu Leu Gln Gln Pro Ala Ala Glu Arg Ala Ala His Arg Gly Gln
      50                55                60
Gly Pro Arg Gly Ala Ala Gly Gly Val Arg Val Pro Gly Ala Gln Gly
65                70                75                80
Ala Gln Arg Ala Ala Gln Glu Thr Glu Phe Pro Ser Gly Ala Ser Thr
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Ser

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<210> 3353
 <211> 420
 <212> DNA
 <213> Homo sapiens

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<400> 3353
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120
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180
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240
accatgactc acctgggcat cagcaggggc atgggcttgg gccaggcta tgatgcacca
300
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<210> 3354
 <211> 107
 <212> PRT
 <213> Homo sapiens

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<400> 3354
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Gly Ile Asn Ile Phe Pro Ser Pro Asp Gln Pro Ala Asn Val Pro Val
      20                25                30
Leu Pro Pro Ala Met Asn Thr Gly Gly Ser Leu Pro Asp Leu Thr Asn
      35                40                45
Leu His Phe Pro Pro Pro Leu Pro Thr Pro Leu Asp Pro Glu Glu Thr
      50                55                60
Ala Tyr Pro Ser Leu Ser Gly Gly Asn Ser Thr Ser Asn Leu Thr His
65                70                75                80
Thr Met Thr His Leu Gly Ile Ser Arg Gly Met Gly Leu Gly Pro Gly
      85                90                95
Tyr Asp Ala Pro Gly Arg Pro Pro Gly Tyr Gln
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<210> 3355
 <211> 474
 <212> DNA
 <213> Homo sapiens

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 120
 gacaagagtc atgcttttct ccccatcatt ccaaacaccc agagagggtca gctagaagac
 180
 agactgaaca accaggcgcg taccatagct ttccttcttg aacaagcctt ccgcatcaag
 240
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 300
 aggaagttac tggaaagcca catccagacc atcaccagca tcgtcaaaaa actcagccaa
 360
 aatattgaga ttttagaaga ccaaataaga gctcgagatc aggcggccac aggaactaac
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 474

<210> 3356
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 3356
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 Asp Arg Leu Asn Asn Gln Ala Arg Thr Ile Ala Phe Leu Leu Glu Gln
 35 40 45
 Ala Phe Arg Ile Lys Glu Asp Ile Ser Ala Cys Leu Gln Gly Thr His
 50 55 60
 Gly Phe Arg Lys Glu Glu Ser Leu Ala Arg Lys Leu Leu Glu Ser His
 65 70 75 80
 Ile Gln Thr Ile Thr Ser Ile Val Lys Lys Leu Ser Gln Asn Ile Glu
 85 90 95
 Ile Leu Glu Asp Gln Ile Arg Ala Arg Asp Gln Ala Ala Thr Gly Thr
 100 105 110
 Asn Phe Ala Val His Glu Ile Asn Ile Lys His Leu Gln Gly Val Gly
 115 120 125
 Arg Ser Phe
 130

<210> 3357
 <211> 2268
 <212> DNA
 <213> Homo sapiens

<400> 3357

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 180
 aagaaaaccg catcctggat ggatagcctg tgcagcagag gtcttggcca cttgaatgat
 240
 tttctccata gataggtagc tctgctggga ggaacgggtt tggcgtgtgg gacgcagctg
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 cctctgtact ggggagtcac ggagtggccg ggctccaggg acatggcggc ggcctctgcg
 360
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 420
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 480
 agaaacatta ccaaggtcct cattgcaaac agaggagaaa ttgcctgcag ggtgatgcgc
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 960
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 1020
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 1380
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 2160
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<210> 3358

<211> 493

<212> PRT

<213> Homo sapiens

<400> 3358

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Asp	Met	Ala	Asp	Glu	Ala	Tyr	Ser	Ile	Gly	Pro	Ala	Pro	Ser	Gln	Gln
		20						25					30		
Ser	Tyr	Leu	Ser	Met	Glu	Lys	Ile	Ile	Gln	Val	Ala	Lys	Thr	Ser	Ala
	35					40						45			
Ala	Gln	Ala	Ile	His	Pro	Gly	Cys	Gly	Phe	Leu	Ser	Glu	Asn	Met	Glu
	50					55					60				
Phe	Ala	Glu	Leu	Cys	Lys	Gln	Glu	Gly	Ile	Ile	Phe	Ile	Gly	Pro	Pro
65				70					75					80	
Pro	Ser	Ala	Ile	Arg	Asp	Met	Gly	Ile	Lys	Ser	Thr	Ser	Lys	Ser	Ile
				85					90					95	
Met	Ala	Ala	Ala	Gly	Val	Pro	Val	Val	Glu	Gly	Tyr	His	Gly	Glu	Asp
			100					105					110		
Gln	Ser	Asp	Gln	Cys	Leu	Lys	Glu	His	Ala	Arg	Arg	Ile	Gly	Tyr	Pro
	115					120						125			
Val	Met	Ile	Lys	Ala	Val	Arg	Gly	Gly	Gly	Gly	Lys	Gly	Met	Arg	Ile
	130					135					140				
Val	Arg	Ser	Glu	Gln	Glu	Phe	Gln	Glu	Gln	Leu	Glu	Ser	Ala	Arg	Arg
145				150						155				160	
Glu	Ala	Lys	Lys	Ser	Phe	Asn	Asp	Asp	Ala	Met	Leu	Ile	Glu	Lys	Phe
				165					170					175	
Val	Asp	Thr	Pro	Arg	His	Val	Glu	Val	Gln	Val	Phe	Gly	Asp	His	His
			180					185					190		
Gly	Asn	Ala	Val	Tyr	Leu	Phe	Glu	Arg	Asp	Cys	Ser	Val	Gln	Arg	Arg

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<210> 3360

<211> 149

<212> PRT

<213> Homo sapiens

<400> 3360

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			20					25					30		
Arg	Ile	Leu	Leu	Val	Lys	Tyr	Ser	Ala	Asn	Glu	Glu	Asn	Lys	Tyr	Asp
		35					40					45			
Tyr	Leu	Pro	Thr	Thr	Val	Asn	Val	Cys	Ser	Glu	Leu	Val	Lys	Leu	Val
	50					55					60				
Phe	Cys	Val	Leu	Val	Ser	Phe	Cys	Val	Ile	Lys	Lys	Asp	His	Gln	Ser
65					70					75				80	
Arg	Asn	Leu	Lys	Tyr	Ala	Ser	Trp	Lys	Glu	Phe	Ser	Asp	Phe	Met	Lys
			85					90					95		
Trp	Ser	Ile	Pro	Ala	Phe	Leu	Tyr	Phe	Leu	Asp	Asn	Leu	Ile	Val	Phe
			100					105					110		
Tyr	Val	Leu	Ser	Tyr	Leu	Gln	Pro	Ala	Met	Ala	Val	Ile	Phe	Ser	Asn
		115				120						125			
Phe	Ser	Ile	Ile	Thr	Thr	Ala	Leu	Leu	Phe	Arg	Ile	Val	Leu	Lys	Arg
	130					135						140			
Arg	Leu	Asn	Trp	Ile											
145															

<210> 3361

<211> 1040

<212> DNA

<213> Homo sapiens

<400> 3361

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 300
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 600
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 660
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 720
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<210> 3362

<211> 252

<212> PRT

<213> Homo sapiens

<400> 3362

Met	Arg	Pro	Trp	Glu	Met	Thr	Ser	Asn	Arg	Gln	Pro	Pro	Ser	Val	Arg
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Pro	Ser	Gln	His	His	Phe	Ser	Gly	Glu	Arg	Cys	Asn	Thr	Pro	Ala	Arg
			20					25					30		
Asn	Arg	Arg	Ser	Pro	Pro	Val	Arg	Arg	Gln	Arg	Gly	Arg	Arg	Asp	Arg
			35				40					45			
Leu	Ser	Arg	His	Asn	Ser	Ile	Ser	Gln	Asp	Glu	Asn	Tyr	His	His	Leu
			50			55					60				
Pro	Tyr	Ala	Gln	Gln	Gln	Ala	Ile	Glu	Glu	Pro	Arg	Ala	Phe	His	Pro
65					70					75				80	
Pro	Asn	Val	Ser	Pro	Arg	Leu	Leu	His	Pro	Ala	Ala	His	Pro	Pro	Gln
				85					90					95	
Gln	Asn	Ala	Val	Met	Val	Asp	Ile	His	Asp	Gln	Leu	His	Gln	Gly	Thr
			100				105						110		
Val	Pro	Val	Ser	Tyr	Thr	Val	Thr	Val	Ala	Pro	His	Gly	Ile	Pro	
			115				120				125				
Leu	Cys	Thr	Gly	Gln	His	Ile	Pro	Ala	Cys	Ser	Thr	Gln	Gln	Val	Pro
			130			135					140				
Gly	Cys	Ser	Val	Val	Phe	Ser	Gly	Gln	His	Leu	Pro	Val	Cys	Ser	Val

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145          150          155          160
Pro Pro Pro Met Leu Gln Ala Cys Ser Val Gln His Leu Pro Val Pro
          165          170          175
Tyr Ala Ala Phe Pro Pro Leu Ile Ser Ser Asp Pro Phe Leu Ile His
          180          185          190
Pro Pro His Leu Ser Pro His His Pro Pro His Leu Pro Pro Pro Gly
          195          200          205
Gln Phe Val Pro Phe Gln Thr Gln Gln Ser Arg Ser Pro Leu Gln Arg
          210          215          220
Ile Glu Asn Glu Val Glu Leu Leu Gly Glu His Leu Pro Gly Ala His
225          230          235          240
Pro Gln His Pro His Leu Leu Ile Asn Ile Ser Thr
          245          250

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<210> 3363
<211> 718
<212> DNA
<213> Homo sapiens

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<400> 3363
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120
gtagctcagg agtgtctccg gagcccaactg gagaagcccc ccaacggcct cctcttcccc
180
cagcacgggg actatcagta cggccgcaac aacatctaaa cagaccactt ccaatacage
240
cggcagagct acccaaactc gtacagtttg aaccgctatg atgtgtagag tccaaaggac
300
aggaccagac tgttggtgac tccttccccg gccccacag cagtatcaga aacttctgac
360
aatcagtga tgtacaacc agccgagggg acggtgcata actctccatc agaagccctg
420
gggttccttg cccccgtga gccgcaggag gatgcgttgc ctgcagtgca gacggccgtg
480
agctctgggc aaacctaaac agagaccagt gtcccatgct ctttcttctt ggagcctgtc
540
atctgagggc cgtgtccctg cggagatctt ggccacgttg tacctttcca tgtggaatta
600
ttcccccaagc agtgtagctc agagcacttg tgtctgcatt ccagataaca ttcaggacct
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718

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<210> 3364
<211> 163
<212> PRT
<213> Homo sapiens

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<400> 3364
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1          5          10          15
Ala Leu Gln Ala Thr His Pro Pro Ala Ala His Gly Gly Pro Gly Thr

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	20		25		30
Pro Gly Leu Leu Met Glu Ser Tyr Ala Pro Ser Pro Arg Leu Gly Cys					
35			40		45
Thr Phe Thr Asp Cys Gln Lys Phe Leu Ile Leu Leu Trp Gly Pro Gly					
50			55		60
Lys Glu Ser Pro Thr Val Trp Ser Cys Pro Leu Asp Ser Thr His His					
65			70		75
Ser Gly Ser Asn Cys Thr Ser Leu Gly Ser Ser Ala Gly Cys Ile Gly					
	85		90		95
Ser Gly Leu Phe Arg Cys Cys Cys Gly Arg Thr Asp Ser Pro Arg Ala					
	100		105		110
Gly Gly Arg Gly Gly Arg Trp Gly Ala Ser Pro Val Gly Ser Gly Asp					
	115		120		125
Thr Pro Glu Leu Leu Gly Arg Gln Cys His Pro Lys Asn His Gly His					
	130		135		140
Asp Gly Val Pro Asp His Ala Gly Gln Pro Ile Pro His His Gln Arg					
145		150		155	160
Ser Trp Ala					

<210> 3365

<211> 2389

<212> DNA

<213> Homo sapiens

<400> 3365

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120
tcgggtggca gcgccgggcg caacgcaggg gtcacggcga cggcggcggc ggctgacggc
180
tggaagggtta ggcttccttc accgctcgtc ctcttctctc gctccgctcg gtgtcaggcg
240
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420
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480
gagcgtcgcg gggctctcag taagtggaca aactacattc atgggtggca ggatcggttg
540
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600
tgcagaggat ccatctgtct tagcaaggct gtcacacac ctacgattt tgatgaatgt
660
cgatttgata ttagtgtaaa tgatagtgtt tggatctctc gtgctcagga tccagatcat
720
agacagcaat ggatagatgc cattgaacag cacaagactg aatctggata tggatctgaa
780
tccagcttgc gtcgacatgg ctcaatgggtg tccctgggtg ctggagcaag tggctactct
840

gcaacatcca cctcttcatt caagaaaggc cacagtttac gtgagaagtt ggctgaaatg
900
gaaacattta gagacatctt atgtagacaa gttgacacgc tacagaagta ctttgatgcc
960
tgtgctgatg ctgtctctaa ggatgaactt caaagggata aagtggtaga agatgatgaa
1020
gatgactttc ctacaacgcg ttctgatggg gacttcttgc atagtaccaa cggcaataaa
1080
gaaaagttat ttccacatgt gacacaaaaa ggaattaatg gtatagactt taaaggggaa
1140
gcgataactt ttaaagcaac tactgctgga atccttgcaa cactttctca ttgtattgaa
1200
ctaattggta aacgtgagga cagctggcag aagagactgg ataaggaaac tgagaagaaa
1260
agaagaacag aggaagcata taaaaatgca atgacagaac ttaagaaaaa atcccacttt
1320
ggaggaccag attatgaaga aggccctaac agtctgatta atgaagaaga gttctttgat
1380
gctgttgaag ctgctcttga cagacaagat aaaatagaag aacagtcaca gagtgaaaag
1440
gtgagattac attggcctac atccttgccc tctggagatg ccttttcttc tgtggggaca
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catagatttg tccaaaagcc ctatagtgcg tcttctcca tgtcttccat tgatctagtc
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1620
atgacttact cattacagga tgtaggcgga gatgccatt ggcagttggg tgtagaagaa
1680
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gctgataatg caatcatcat ttatcaaaca cacaagaggg tgtggcctgc ttctcagcga
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1980
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2040
gtccgtgcc aataaatgt tgctatgatt tgtcaaacct tggtaagccc accagagggg
2100
aaccaggaaa ttagcaggga caacattcta tgcaagatta catatgtagc taatgtgaac
2160
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2220
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2280
tagtattaac aggtactaga agatatgttt tatctttttt taactttatt tgactaatat
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2389

<210> 3366

<211> 624
 <212> PRT
 <213> Homo sapiens

<400> 3366

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Glu	Thr	Glu	Ser	Gly	Pro	Pro	Val	Glu	Arg	Cys	Gly	Val	Leu	Ser	Lys
			20					25					30		
Trp	Thr	Asn	Tyr	Ile	His	Gly	Trp	Gln	Asp	Arg	Trp	Val	Val	Leu	Lys
		35				40						45			
Asn	Asn	Ala	Leu	Ser	Tyr	Tyr	Lys	Ser	Glu	Asp	Glu	Thr	Glu	Tyr	Gly
	50					55					60				
Cys	Arg	Gly	Ser	Ile	Cys	Leu	Ser	Lys	Ala	Val	Ile	Thr	Pro	His	Asp
65					70					75					80
Phe	Asp	Glu	Cys	Arg	Phe	Asp	Ile	Ser	Val	Asn	Asp	Ser	Val	Trp	Tyr
				85					90					95	
Leu	Arg	Ala	Gln	Asp	Pro	Asp	His	Arg	Gln	Gln	Trp	Ile	Asp	Ala	Ile
			100					105					110		
Glu	Gln	His	Lys	Thr	Glu	Ser	Gly	Tyr	Gly	Ser	Glu	Ser	Ser	Leu	Arg
		115					120						125		
Arg	His	Gly	Ser	Met	Val	Ser	Leu	Val	Ser	Gly	Ala	Ser	Gly	Tyr	Ser
	130					135						140			
Ala	Thr	Ser	Thr	Ser	Ser	Phe	Lys	Lys	Gly	His	Ser	Leu	Arg	Glu	Lys
145					150					155					160
Leu	Ala	Glu	Met	Glu	Thr	Phe	Arg	Asp	Ile	Leu	Cys	Arg	Gln	Val	Asp
				165					170					175	
Thr	Leu	Gln	Lys	Tyr	Phe	Asp	Ala	Cys	Ala	Asp	Ala	Val	Ser	Lys	Asp
			180					185					190		
Glu	Leu	Gln	Arg	Asp	Lys	Val	Val	Glu	Asp	Asp	Glu	Asp	Asp	Phe	Pro
		195					200					205			
Thr	Thr	Arg	Ser	Asp	Gly	Asp	Phe	Leu	His	Ser	Thr	Asn	Gly	Asn	Lys
	210					215						220			
Glu	Lys	Leu	Phe	Pro	His	Val	Thr	Pro	Lys	Gly	Ile	Asn	Gly	Ile	Asp
225					230					235					240
Phe	Lys	Gly	Glu	Ala	Ile	Thr	Phe	Lys	Ala	Thr	Thr	Ala	Gly	Ile	Leu
				245					250					255	
Ala	Thr	Leu	Ser	His	Cys	Ile	Glu	Leu	Met	Val	Lys	Arg	Glu	Asp	Ser
			260					265					270		
Trp	Gln	Lys	Arg	Leu	Asp	Lys	Glu	Thr	Glu	Lys	Lys	Arg	Arg	Thr	Glu
		275					280						285		
Glu	Ala	Tyr	Lys	Asn	Ala	Met	Thr	Glu	Leu	Lys	Lys	Lys	Ser	His	Phe
	290					295					300				
Gly	Gly	Pro	Asp	Tyr	Glu	Glu	Gly	Pro	Asn	Ser	Leu	Ile	Asn	Glu	Glu
305					310					315					320
Glu	Phe	Phe	Asp	Ala	Val	Glu	Ala	Ala	Leu	Asp	Arg	Gln	Asp	Lys	Ile
				325					330					335	
Glu	Glu	Gln	Ser	Gln	Ser	Glu	Lys	Val	Arg	Leu	His	Trp	Pro	Thr	Ser
			340					345					350		
Leu	Pro	Ser	Gly	Asp	Ala	Phe	Ser	Ser	Val	Gly	Thr	His	Arg	Phe	Val
		355					360					365			
Gln	Lys	Pro	Tyr	Ser	Arg	Ser	Ser	Ser	Met	Ser	Ser	Ile	Asp	Leu	Val
	370					375					380				
Ser	Ala	Ser	Asp	Asp	Val	His	Arg	Phe	Ser	Ser	Gln	Val	Glu	Glu	Met

385					390					395				400	
Val	Gln	Asn	His	Met	Thr	Tyr	Ser	Leu	Gln	Asp	Val	Gly	Gly	Asp	Ala
				405					410					415	
Asn	Trp	Gln	Leu	Val	Val	Glu	Glu	Gly	Glu	Met	Lys	Val	Tyr	Arg	Arg
			420					425						430	
Glu	Val	Glu	Glu	Asn	Gly	Ile	Val	Leu	Asp	Pro	Leu	Lys	Ala	Thr	His
		435					440					445			
Ala	Val	Lys	Gly	Val	Thr	Gly	His	Glu	Val	Cys	Asn	Tyr	Phe	Trp	Asn
	450					455					460				
Val	Asp	Val	Arg	Asn	Asp	Trp	Glu	Thr	Thr	Ile	Glu	Asn	Phe	His	Val
465					470					475					480
Val	Glu	Thr	Leu	Ala	Asp	Asn	Ala	Ile	Ile	Ile	Tyr	Gln	Thr	His	Lys
				485				490						495	
Arg	Val	Trp	Pro	Ala	Ser	Gln	Arg	Asp	Val	Leu	Tyr	Leu	Ser	Val	Ile
			500					505					510		
Arg	Lys	Ile	Pro	Ala	Leu	Thr	Glu	Asn	Asp	Pro	Glu	Thr	Trp	Ile	Val
		515					520					525			
Cys	Asn	Phe	Ser	Val	Asp	His	Asp	Ser	Ala	Pro	Leu	Asn	Asn	Arg	Cys
	530					535					540				
Val	Arg	Ala	Lys	Ile	Asn	Val	Ala	Met	Ile	Cys	Gln	Thr	Leu	Val	Ser
545					550					555					560
Pro	Pro	Glu	Gly	Asn	Gln	Glu	Ile	Ser	Arg	Asp	Asn	Ile	Leu	Cys	Lys
				565				570					575		
Ile	Thr	Tyr	Val	Ala	Asn	Val	Asn	Pro	Gly	Gly	Trp	Ala	Pro	Ala	Ser
			580				585						590		
Val	Leu	Arg	Ala	Val	Ala	Lys	Arg	Glu	Tyr	Pro	Lys	Phe	Leu	Lys	Arg
		595					600					605			
Phe	Thr	Ser	Tyr	Val	Gln	Glu	Lys	Thr	Ala	Gly	Lys	Pro	Ile	Leu	Phe
	610					615					620				

<210> 3367

<211> 366

<212> DNA

<213> Homo sapiens

<400> 3367

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120tgccttcccc acttcaggcc tcttagtgct aaggatgtga gaggcaaggg ctgctgggag
180agtatttttac ggactgaagg aggcgtgccg cctgccttgc cctcctactg gtggaggaag
240gaggtgctgg gagccccaca actcagggcc ccccgacgcc cagtaaggcc actgtacacc
300cctcctgacc cagaccataa ccagcctccg attgtgcttt tgaccctgtt tccttcaggc
360

accagg

366

<210> 3368

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3368

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Met Thr Glu Asn Tyr Ala Thr Glu Val Leu Glu Ala Gly Ile Val Ala
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Ser Gln Glu His Gly Gly Cys Leu Pro His Phe Arg Pro Leu Ser Val
          20           25           30
Lys Asp Val Arg Gly Lys Gly Cys Trp Glu Ser Ile Leu Arg Thr Glu
          35           40           45
Gly Gly Val Pro Pro Ala Leu Pro Ser Tyr Trp Trp Arg Lys Glu Val
          50           55           60
Leu Gly Ala Pro Gln Leu Arg Ala Pro Arg Arg Pro Val Arg Pro Leu
65           70           75           80
Tyr Thr Pro Pro Asp Pro Asp His Asn Gln Pro Pro Ile Val Leu Leu
          85           90           95
Thr Leu Phe Pro Ser Gly Thr Arg
          100

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<210> 3369

<211> 1405

<212> DNA

<213> Homo sapiens

<400> 3369

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120
aagggttttat ataatgccaa taaaaatgat gattatgaca acgaggagat cttaacctat
180
gaggaaatgt cactttatca tcagccagca aataggaaga gacctatcat cttgattggt
240
ccacagaact gtggccagaa tgaattgcgt cagaggctca tgaacaaaga aaaggaccgc
300
tttgcattctg cagttcctca tacaaccgag agtaggcgag accaagaagt agccggtaga
360
gattaccact ttgtttcgcg gcaagcattc gaggcagaca tagcagctgg aaagttcatt
420
gagcatggtg aatttgagaa gaatttgtat ggaactagca tagattctgt acggcaagtg
480
atcaactctg gcaaaatatg tcttttaagt cttegtacac agtcattgaa gactctccgg
540
aattcagatt tgaaaccata tattatcttc attgcacccc cttcacaaga aagacttcgg
600
gcattattgg ccaaagaagg caagaatcca aagcctgaag agttgagaga aatcattgag
660
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720
gatcttgata aagcctatca ggaattgctt aggttaatta acaaacttga tactgaacct
780
cagtgggtac catccacttg gctgaggtga aagaaacatc cattctgtgg catggtggac
840
ttgatctggc aaaaactgcc aataggagga ctgcccagca ctgcagcaag attgaggata
900

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agatggaagg cagcagtata agctgtagat ctgttcttag atctcttgaa ttagtgagac
 960
 gacagttccc ttaggcagtt tgtgcatggc atcctttatt ctctatacat ggcttttagcg
 1020
 gttcttgccct cattttggga ttctaaatgg aagctttcaa cagagcattc cattttgtcc
 1080
 tgttaaaacc ttttgttttc acctaaaccc tttctgctta gttgtatctc tgtgaaaaac
 1140
 ttgtatacac aagcgcccat gtctcacaca aatattgatg tgattattct taagtgttaa
 1200
 atcattaaca cttaaatac ttcatgggga atattgagca gagggactgt gcttctatgc
 1260
 actgggcaag gcagtatttg cttaggaaac taatttagtc atcagagata ctttcctaaa
 1320
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 1380
 attcatttat atgtcttttg attct
 1405

<210> 3370

<211> 269

<212> PRT

<213> Homo sapiens

<400> 3370

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Thr	Ile	Glu	Glu	Asp	Lys	Glu	Gln	Lys	Asn	Gln	Glu	Asn	Cys	Gly	Ala	20	25	30	
Lys	Lys	Asn	Lys	Lys	Lys	Arg	Lys	Lys	Val	Leu	Tyr	Asn	Ala	Asn	Lys	35	40	45	
Asn	Asp	Asp	Tyr	Asp	Asn	Glu	Glu	Ile	Leu	Thr	Tyr	Glu	Glu	Met	Ser	50	55	60	
Leu	Tyr	His	Gln	Pro	Ala	Asn	Arg	Lys	Arg	Pro	Ile	Ile	Leu	Ile	Gly	65	70	75	80
Pro	Gln	Asn	Cys	Gly	Gln	Asn	Glu	Leu	Arg	Gln	Arg	Leu	Met	Asn	Lys	85	90	95	
Glu	Lys	Asp	Arg	Phe	Ala	Ser	Ala	Val	Pro	His	Thr	Thr	Arg	Ser	Arg	100	105	110	
Arg	Asp	Gln	Glu	Val	Ala	Gly	Arg	Asp	Tyr	His	Phe	Val	Ser	Arg	Gln	115	120	125	
Ala	Phe	Glu	Ala	Asp	Ile	Ala	Ala	Gly	Lys	Phe	Ile	Glu	His	Gly	Glu	130	135	140	
Phe	Glu	Lys	Asn	Leu	Tyr	Gly	Thr	Ser	Ile	Asp	Ser	Val	Arg	Gln	Val	145	150	155	160
Ile	Asn	Ser	Gly	Lys	Ile	Cys	Leu	Leu	Ser	Leu	Arg	Thr	Gln	Ser	Leu	165	170	175	
Lys	Thr	Leu	Arg	Asn	Ser	Asp	Leu	Lys	Pro	Tyr	Ile	Ile	Phe	Ile	Ala	180	185	190	
Pro	Pro	Ser	Gln	Glu	Arg	Leu	Arg	Ala	Leu	Leu	Ala	Lys	Glu	Gly	Lys	195	200	205	
Asn	Pro	Lys	Pro	Glu	Glu	Leu	Arg	Glu	Ile	Ile	Glu	Lys	Thr	Arg	Glu	210	215	220	
Met	Glu	Gln	Asn	Asn	Gly	His	Tyr	Phe	Asp	Thr	Ala	Ile	Val	Asn	Ser				

225		230		235		240									
Asp	Leu	Asp	Lys	Ala	Tyr	Gln	Glu	Leu	Leu	Arg	Leu	Ile	Asn	Lys	Leu
				245					250					255	
Asp	Thr	Glu	Pro	Gln	Trp	Val	Pro	Ser	Thr	Trp	Leu	Arg			
			260					265							

<210> 3371

<211> 790

<212> DNA

<213> Homo sapiens

<400> 3371

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120
ggtttcaaaa gtccggtggc ctggggctgt atgggtccac cccctggggg ggttgaggaa
180
gttgctgtcg tctgaggtac tgccgtacgt gtagtcctgg tccccgcttt tgccctggcc
240
aaagaagcac caagggagca tctggaccac caggctgcac accaaccctt cccagaccg
300
cgattccgac aagagacggg gcacccttca ttgcaaagag atttccccag atcctttctc
360
cttgatctac caaactttcc agatctttcc aaagctgata tcaatgggca gaatccaaat
420
atccaggtca ccatagaggt ggtcgacggt cctgactctg aagcagataa agatcagcat
480
ccggagaata agcccagctg gtcagtcca tcccccgact ggcgggcctg gtggcagagg
540
tcctgtcct tggccagggc aaacagcggg gaccaggact acaagtacga cagtacctca
600
gacgacagca acttcctcaa cccccccagg ggggtgggacc atacagcccc aggccaccgg
660
acttttgaaa ccaaagatca gccagaatat gattccacag atggcgaggg tgactggagt
720
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780
ggctacgct
790

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<210> 3372

<211> 198

<212> PRT

<213> Homo sapiens

<400> 3372

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Glu	Ala	Pro	Arg	Glu	His	Leu	Asp	His	Gln	Ala	Ala	His	Gln	Pro	Phe
			20					25					30		
Pro	Arg	Pro	Arg	Phe	Arg	Gln	Glu	Thr	Gly	His	Pro	Ser	Leu	Gln	Arg
		35				40						45			
Asp	Phe	Pro	Arg	Ser	Phe	Leu	Leu	Asp	Leu	Pro	Asn	Phe	Pro	Asp	Leu

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      50              55              60
Ser Lys Ala Asp Ile Asn Gly Gln Asn Pro Asn Ile Gln Val Thr Ile
65              70              75              80
Glu Val Val Asp Gly Pro Asp Ser Glu Ala Asp Lys Asp Gln His Pro
      85              90              95
Glu Asn Lys Pro Ser Trp Ser Val Pro Ser Pro Asp Trp Arg Ala Trp
      100             105             110
Trp Gln Arg Ser Leu Ser Leu Ala Arg Ala Asn Ser Gly Asp Gln Asp
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Tyr Lys Tyr Asp Ser Thr Ser Asp Asp Ser Asn Phe Leu Asn Pro Pro
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Arg Gly Trp Asp His Thr Ala Pro Gly His Arg Thr Phe Glu Thr Lys
145             150             155             160
Asp Gln Pro Glu Tyr Asp Ser Thr Asp Gly Glu Gly Asp Trp Ser Leu
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 <212> DNA
 <213> Homo sapiens

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 Ser Ile Glu Asp Gly Pro Pro Phe Val Glu Pro Leu Leu Asn Phe Ile
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 Pro Gly Ser Ser Trp Pro Arg Gly Ala Leu Lys Ser Arg Pro Gly Cys
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<210> 3378

<211> 970

<212> PRT

<213> Homo sapiens

<400> 3378

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Cys	Leu	Phe	Leu	Ser	Arg	Thr	Phe	His	Glu	Glu	Glu	Gly	Ile	Asp	Glu
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Tyr	Ser	Pro	Phe	Arg	Thr	Glu	Glu	Glu	Val	Met	Thr	Gln	Phe	Met	Lys
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<210> 3379

<211> 898

<212> DNA

<213> Homo sapiens

<400> 3379

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<211> 299

<212> PRT

<213> Homo sapiens

<400> 3380

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Pro	Gln	Asp	Pro	Phe	Ser	Val	Gly	Arg	Tyr	Gly	Gly	Arg	Val	Ser	Leu
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		100						105					110		
Leu	Ala	His	Asp	Gly	Pro	His	Glu	Gly	Arg	Ala	Xaa	Leu	Thr	Val	Leu
		115					120					125			
Val	Glu	Asp	Val	Asn	Asp	Asn	Ala	Pro	Ala	Phe	Ser	Gln	Ser	Leu	Tyr

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	180		185	
Thr Leu Phe Thr Ile Val Gly Thr Leu Ala Leu Gly His Asp Gly Ser				
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Gly Ala Val Asp Val Val Leu Glu Ala Arg Asp His Gly Ala Pro Val				
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225		230		235
His Ala Pro Ser Phe Thr Leu Phe His Tyr Arg Val Ala Val Thr Glu				
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<210> 3381

<211> 1379

<212> DNA

<213> Homo sapiens

<400> 3381

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<210> 3382

<211> 279

<212> PRT

<213> Homo sapiens

<400> 3382

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			20					25					30		
Glu	Glu	Glu	Gln	Glu	Glu	Ser	Glu	Glu	Ala	Ala	Cys	Gly	Ser	Lys	Lys
			35				40					45			
Arg	Val	Val	Pro	Gly	Ile	Val	Tyr	Leu	Gly	His	Ile	Pro	Pro	Arg	Phe
			50			55					60				
Arg	Pro	Leu	His	Val	Arg	Asn	Leu	Leu	Ser	Ala	Tyr	Gly	Glu	Val	Gly
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Arg	Val	Phe	Phe	Gln	Ala	Glu	Asp	Arg	Phe	Val	Arg	Arg	Lys	Lys	Lys
			85					90					95		
Ala	Ala	Ala	Ala	Ala	Gly	Gly	Lys	Lys	Arg	Ser	Tyr	Thr	Lys	Asp	Tyr
			100					105					110		
Thr	Glu	Gly	Trp	Val	Glu	Phe	Arg	Asp	Lys	Arg	Ile	Ala	Lys	Arg	Val
			115				120					125			
Ala	Ala	Ser	Leu	His	Asn	Thr	Pro	Met	Gly	Ala	Arg	Arg	Arg	Ser	Pro
			130			135				140					
Phe	Arg	Tyr	Asp	Leu	Trp	Asn	Leu	Lys	Tyr	Leu	His	Arg	Phe	Thr	Trp
145				150				155						160	
Ser	His	Leu	Ser	Glu	His	Leu	Ala	Phe	Glu	Arg	Gln	Val	Arg	Arg	Gln
			165					170					175		
Arg	Leu	Arg	Ala	Glu	Val	Ala	Gln	Ala	Lys	Arg	Glu	Thr	Asp	Phe	Tyr
			180				185					190			
Leu	Gln	Ser	Val	Glu	Arg	Gly	Gln	Arg	Phe	Leu	Ala	Ala	Asp	Gly	Asp
		195				200					205				
Pro	Ala	Arg	Pro	Asp	Gly	Ser	Trp	Thr	Phe	Ala	Gln	Arg	Pro	Thr	Glu

210	215	220
Gln Glu Leu Arg Ala Arg Lys Ala Ala Arg Pro Gly Gly Arg Glu Arg		
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Ala Arg Leu Ala Thr Ala Gln Asp Lys Ala Arg Ser Asn Lys Gly Leu		240
	245	250
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<210> 3383
 <211> 309
 <212> DNA
 <213> Homo sapiens

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<210> 3384
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 3384
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20 25 30
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35 40 45
Asn Ala His Pro Trp Glu Leu Ser Cys Pro Arg Ser Pro Thr Gln Thr
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Leu Gln His Glu Arg Ala Arg Leu Asn Leu Lys Lys Lys Lys Phe Arg
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<210> 3385
 <211> 720
 <212> DNA
 <213> Homo sapiens

<400> 3385

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<212> PRT

<213> Homo sapiens

<400> 3386

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			20					25					30		
Gln	Pro	Pro	Ala	Ser	Ala	Thr	Thr	Pro	Val	Pro	Leu	Ala	Arg	Phe	Phe
		35					40					45			
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	50					55					60				
Glu	Asp	Pro	Leu	Glu	Met	Glu	Arg	Ser	Pro	Gln	Leu	Arg	Lys	His	Ala
65					70					75				80	
Cys	Arg	Val	Met	Gly	Ala	Leu	Asn	Thr	Val	Val	Glu	Asn	Leu	His	Asp
			85						90					95	
Pro	Asp	Lys	Val	Ser	Ser	Val	Leu	Ala	Leu	Val	Gly	Lys	Ala	His	Ala
		100						105					110		
Leu	Lys	His	Lys	Val	Glu	Pro	Val	Tyr	Phe	Lys	Ile	Leu	Ser	Gly	Val
	115						120					125			
Ile	Leu	Glu	Val	Val	Ala	Glu	Glu	Phe	Ala	Ser	Asp	Phe	Pro	Pro	Glu
	130					135					140				
Thr	Gln	Arg	Ala	Trp	Ala	Lys	Leu	Arg	Gly	Leu	Ile	Tyr	Ser	His	Val
145					150					155				160	
Thr	Ala	Ala	Tyr	Lys	Glu	Val	Gly	Trp	Val	Gln	Gln	Val	Pro	Asn	Ala
			165						170					175	
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<210> 3387

<211> 3299

<212> DNA

<213> Homo sapiens

<400> 3387

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<211> 153

<212> PRT

<213> Homo sapiens

<400> 3388

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		20						25					30		
Leu	Arg	Val	Val	Leu	Ala	Leu	Arg	Gly	Arg	Glu	Glu	Val	Ser	Asp	Ala
		35					40					45			
Gly	Cys	Gly	Gly	Pro	Arg	Ile	Thr	Ile	Asn	Lys	Asp	Thr	Lys	Val	Pro
	50					55					60				
Asn	Ala	Cys	Leu	Phe	Thr	Ile	Asn	Lys	Glu	Asp	His	Thr	Leu	Gly	Asn
65				70					75					80	
Ile	Ile	Lys	Ser	Gln	Leu	Leu	Lys	Asp	Pro	Gln	Val	Leu	Phe	Ala	Gly
			85					90						95	
Tyr	Lys	Val	Pro	His	Pro	Leu	Glu	His	Lys	Ile	Ile	Ile	Arg	Val	Gln
		100					105						110		
Thr	Thr	Pro	Asp	Tyr	Ser	Pro	Gln	Glu	Ala	Phe	Thr	Asn	Ala	Ile	Thr
		115					120					125			
Asp	Leu	Ile	Ser	Glu	Leu	Ser	Leu	Leu	Glu	Glu	Arg	Phe	Arg	Val	Ala
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Ile	Lys	Asp	Lys	Gln	Glu	Gly	Ile	Glu							
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<210> 3389

<211> 308

<212> DNA

<213> Homo sapiens

<400> 3389

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308

<210> 3390
<211> 102
<212> PRT
<213> Homo sapiens

<400> 3390
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Ser Asp Gln Pro His Gly Leu Leu Arg Ala Gly Gly Trp Gly Gly Glu
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<210> 3391
<211> 1295
<212> DNA
<213> Homo sapiens

<400> 3391
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<210> 3392

<211> 355

<212> PRT

<213> Homo sapiens

<400> 3392

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Lys	Pro	Asn	Pro	Glu	Ala	Leu	Ser	Asp	Ser	Ser	Glu	Arg	Leu	Phe	Ser
			20					25					30		
Phe	Gly	Val	Ile	Ala	Asp	Val	Gln	Phe	Ala	Asp	Leu	Glu	Asp	Gly	Phe
		35					40					45			
Asn	Phe	Gln	Gly	Thr	Arg	Arg	Arg	Tyr	Tyr	Arg	His	Ser	Leu	Leu	His
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Leu	Gln	Gly	Ala	Ile	Glu	Asp	Trp	Asn	Asn	Glu	Ser	Ser	Met	Pro	Cys
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Cys	Val	Leu	Gln	Leu	Gly	Asp	Ile	Ile	Asp	Gly	Tyr	Asn	Ala	Gln	Tyr
			85						90					95	
Asn	Ala	Ser	Lys	Lys	Ser	Leu	Glu	Leu	Val	Met	Asp	Met	Phe	Lys	Arg
			100					105					110		
Leu	Lys	Val	Pro	Val	His	His	Thr	Trp	Gly	Asn	His	Glu	Phe	Tyr	Asn
		115					120					125			
Phe	Ser	Arg	Glu	Tyr	Leu	Thr	His	Ser	Lys	Leu	Asn	Thr	Lys	Phe	Leu
	130					135					140				
Glu	Asp	Gln	Ile	Val	His	His	Pro	Glu	Thr	Met	Pro	Ser	Glu	Asp	Tyr
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Tyr	Ala	Tyr	His	Phe	Val	Pro	Phe	Pro	Lys	Phe	Arg	Phe	Ile	Leu	Leu
			165					170					175		
Asp	Ala	Tyr	Asp	Leu	Ser	Val	Leu	Gly	Val	Asp	Gln	Ser	Ser	Pro	Lys
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Tyr	Glu	Gln	Cys	Met	Lys	Ile	Leu	Arg	Glu	His	Asn	Pro	Asn	Thr	Glu
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360
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 35 40 45
 Glu Tyr Gln Ser Thr Ser Ala Ser Ala Ser Ala Ser Pro Phe Gln Ser
 50 55 60
 Ala Trp Tyr Ser Glu Ser Glu Ile Thr Gln Gly Ala Arg Ser Arg Ser
 65 70 75 80
 Gln Asn Gln Gln Arg Asp His Asp Ser Lys Arg Pro Lys Leu Ser Cys
 85 90 95
 Thr Asn Cys Thr Thr Ser Ala Gly Arg Asn Val Gly Asn Gly Leu Asn
 100 105 110
 Thr Leu Ser Asp Ser Ser Trp Arg His Ser Gln Val Pro Arg Ser Ser
 115 120 125
 Ser Met Val Leu Gly Ser Phe Gly Thr Asp Leu Met Arg Glu Arg Arg
 130 135 140
 Asp Leu Glu Arg Arg Thr Asp Ser Ser Ile Ser Asn Leu Met Asp Tyr
 145 150 155 160
 Ser His Arg Ser Gly Asp Phe Thr Thr Ser Ser Tyr Val Gln Asp Arg
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 <212> DNA
 <213> Homo sapiens

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492

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<212> PRT

<213> Homo sapiens

<400> 3398

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			20					25					30		
Thr	Leu	Cys	Ser	Val	Pro	Ser	Leu	Glu	Gln	Gln	Gln	Pro	Gly	Xaa	Ala
			35				40					45			
Ala	Ser	Ala	Ile	Pro	Ser	Trp	Leu	Leu	Asn	Asp	Pro	Gly	Val	Glu	Xaa
			50			55				60					
Glu	Val	Met	Gly	Asp	Ala	Val	Leu	Glu	Ala	Ser	His	Asn	Val	Gln	Gly
65					70					75				80	
Cys	Gly	Cys	Ser	Trp	Val	Ser	His	Ser	Gly	Arg	Gly	Val	Gly	Pro	Glu
			85						90					95	
Ala	Glu	Gly	Ala	Gly	Ser	Pro	Gln	Ser	Leu	Gly	His	Gly	Ser	Gly	Gly
			100					105					110		
Trp	Ala	Ala	Arg	Arg	Cys	His	Cys	Leu	Ser	Val	Ala	Gly	Val	Ala	Ala
			115				120					125			
Ala	Ser	Gly	Cys	Pro	Arg	Thr	Glu	Glu	Ala	Ala	Trp	Gly	Glu	Ile	Leu
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<212> DNA

<213> Homo sapiens

<400> 3399

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420

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<211> 1069

<212> PRT

<213> Homo sapiens

<400> 3400

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Cys	Asp	Val	Leu	Leu	Ile	Val	Gly	Asp	Gln	Lys	Phe	Arg	Ala	His	Lys
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Asn	Val	Leu	Ala	Ala	Ser	Ser	Glu	Tyr	Phe	Gln	Ser	Leu	Phe	Thr	Asn
	50				55						60				
Lys	Glu	Asn	Glu	Ser	Gln	Thr	Val	Phe	Gln	Leu	Asp	Phe	Cys	Glu	Pro
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Asp	Ala	Phe	Asp	Asn	Val	Leu	Asn	Tyr	Ile	Tyr	Ser	Ser	Ser	Leu	Phe
			85					90						95	
Val	Glu	Lys	Ser	Ser	Leu	Ala	Ala	Val	Gln	Glu	Leu	Gly	Tyr	Ser	Leu
		100					105						110		
Gly	Ile	Ser	Phe	Leu	Thr	Asn	Ile	Val	Ser	Lys	Thr	Pro	Gln	Ala	Pro
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Ser	Arg	Pro	Ser	Pro	Ser	Ile	Ala	Val	Lys	Ala	Asn	Thr	Asn	Lys	Pro
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His	Val	Pro	Lys	Pro	Ile	Glu	Pro	Leu	His	Asn	Leu	Ser	Leu	Thr	Glu
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Lys	Ser	Trp	Pro	Lys	Asp	Ser	Ser	Val	Val	Tyr	Ala	Lys	Ser	Leu	Glu
	210				215					220					
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Ser Glu Thr Pro Tyr Leu Leu Lys Glu Thr Asn Lys Gly Asn Gly Gln
          290          295          300
Gly Glu Asp Arg Asn Leu Leu Tyr Tyr Ser Lys Leu Gly Leu Val Ile
305          310          315          320
Pro Ser Ser Gly Ser Gly Ser Gly Asn Gln Ser Ile Asp Arg Ser Gly
          325          330          335
Pro Leu Val Lys Ser Leu Leu Arg Arg Ser Leu Ser Met Asp Ser Gln
          340          345          350
Val Pro Val Tyr Ser Pro Ser Ile Asp Leu Lys Ser Ser Gln Gly Ser
          355          360          365
Ser Ser Val Ser Ser Asp Ala Pro Gly Asn Val Leu Cys Ala Leu Ser
          370          375          380
Gln Lys Ser Ser Leu Lys Asp Cys Ser Glu Lys Thr Ala Leu Asp Asp
385          390          395          400
Arg Pro Gln Val Leu Gln Pro His Arg Leu Arg Ser Phe Ser Ala Ser
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Gln Ser Thr Asp Arg Glu Gly Ala Ser Pro Val Thr Glu Val Arg Ile
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Lys Thr Glu Pro Ser Ser Pro Leu Ser Asp Pro Ser Asp Ile Ile Arg
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Val Thr Val Gly Asp Ala Ala Thr Thr Ala Ala Ala Ser Ser Ser Ser
          450          455          460
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Ser Arg Leu Pro Ala Lys Arg Arg Phe Gln Ala Asp Arg Arg Leu Pro
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Phe Lys Lys Leu Lys Val Asn Glu His Gly Ser Pro Val Ser Glu Asp
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Asp Ser Asp Leu Asn Lys Asp Glu Phe Gly Glu Leu Glu Gly Thr Arg
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Pro Asn Lys Lys Phe Lys Cys Lys His Cys Leu Lys Ile Phe Arg Ser
545          550          555          560
Thr Ala Gly Leu His Arg His Val Asn Met Tyr His Asn Pro Glu Lys
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Pro Tyr Ala Cys Asp Ile Cys His Lys Arg Phe His Thr Asn Phe Lys
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Val Trp Thr His Cys Gln Thr Gln His Gly Ile Val Lys Asn Pro Ser
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Pro Ala Ser Ser Ser His Ala Val Leu Asp Glu Lys Phe Gln Arg Lys
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625          630          635          640
Lys Leu Arg Arg Gly Lys Pro Gly Phe Gln Gly Gln Ser Ser Ser Gln
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Lys	Val	Ala	Lys	Pro	Lys	Glu	His	Ala	Pro	Leu	Ala	Ser	Pro	Val	Glu	
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Cys	Pro	Tyr	Cys	Ser	Leu	Arg	Phe	Phe	Ser	Pro	Glu	Leu	Lys	Gln	Glu	
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His	Glu	Ser	Lys	Cys	Glu	Tyr	Lys	Lys	Leu	Thr	Cys	Leu	Glu	Cys	Met	
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Arg	Thr	Phe	Lys	Ser	Ser	Phe	Ser	Ile	Trp	Arg	His	Gln	Val	Glu	Val	
785					790					795					800	
His	Asn	Gln	Asn	Asn	Met	Ala	Pro	Thr	Glu	Asn	Phe	Ser	Leu	Pro	Val	
				805					810					815		
Leu	Asp	His	Asn	Gly	Asp	Val	Thr	Gly	Ser	Ser	Arg	Pro	Gln	Ser	Gln	
			820					825					830			
Pro	Glu	Pro	Asn	Lys	Val	Asn	His	Ile	Val	Thr	Thr	Lys	Asp	Asp	Asn	
		835					840					845				
Val	Phe	Ser	Asp	Ser	Ser	Glu	Gln	Val	Asn	Phe	Asp	Ser	Glu	Asp	Ser	
	850					855				860						
Ser	Cys	Leu	Pro	Glu	Asp	Leu	Ser	Leu	Ser	Lys	Gln	Leu	Lys	Ile	Gln	
865					870					875					880	
Val	Lys	Glu	Glu	Pro	Val	Glu	Glu	Ala	Glu	Glu	Glu	Ala	Pro	Glu	Ala	
			885						890					895		
Ser	Thr	Ala	Pro	Lys	Glu	Ala	Gly	Pro	Ser	Lys	Glu	Ala	Ser	Leu	Trp	
			900					905					910			
Pro	Cys	Glu	Lys	Cys	Gly	Lys	Met	Phe	Thr	Val	His	Lys	Gln	Leu	Glu	
		915					920					925				
Arg	His	Gln	Glu	Leu	Leu	Cys	Ser	Val	Lys	Pro	Phe	Ile	Cys	His	Val	
	930					935					940					
Cys	Asn	Lys	Ala	Phe	Arg	Thr	Asn	Phe	Arg	Leu	Trp	Ser	His	Phe	Gln	
945					950					955					960	
Ser	His	Met	Ser	Gln	Ala	Ser	Glu	Glu	Ser	Ala	His	Lys	Glu	Ser	Glu	
			965						970					975		
Val	Cys	Pro	Val	Pro	Thr	Asn	Ser	Pro	Ser	Pro	Pro	Pro	Leu	Pro	Pro	
			980					985					990			
Pro	Pro	Pro	Leu	Pro	Lys	Ile	Gln	Pro	Leu	Glu	Pro	Asp	Ser	Pro	Thr	
		995					1000					1005				

<210> 3401
<211> 579

<212> DNA

<213> Homo sapiens

<400> 3401

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 120
 gaagtttata ctaggcttgg agaaatgaac aatgctgtga gaaacctcca agaactctta
 180
 gaattagata gttcatcctc attgtgtgtg ctagtaagca ctggttgaaa actctgtagg
 240
 ctgattaatg aagatgtgaa tgagcagggt atgcagggtat taggacctga agacctccag
 300
 agcattatct acaaattgga agaacacgag gaatttttcc cagcatttca ggcatttact
 360
 aatgatctac ttgaaatctt agaaattgat gactctggat gccattgtac ctgcagtaaa
 420
 gaaattaaaa gtactttcat actgaaaaca aatcaaatca tttttactgt gtaaattgta
 480
 ttcttaacat tttgtatttt gtaggattga tcttattttg agacaagggt tgtaaaatgt
 540
 atttgctctc agaattcatc cccttcttag tattaggtc
 579

<210> 3402

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3402

Met	Pro	His	Phe	Gln	Thr	Leu	Gln	Ala	Ile	Val	Ser	His	Phe	Gln	Lys
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Leu	Phe	Asp	Val	Pro	Ser	Leu	Asn	Gly	Val	Tyr	Pro	Arg	Met	Asn	Glu
			20					25					30		
Val	Tyr	Thr	Arg	Leu	Gly	Glu	Met	Asn	Asn	Ala	Val	Arg	Asn	Leu	Gln
		35				40						45			
Glu	Leu	Leu	Glu	Leu	Asp	Ser	Ser	Ser	Ser	Leu	Cys	Val	Leu	Val	Ser
	50					55					60				
Thr	Val	Gly	Lys	Leu	Cys	Arg	Leu	Ile	Asn	Glu	Asp	Val	Asn	Glu	Gln
65					70					75				80	
Val	Met	Gln	Val	Leu	Gly	Pro	Glu	Asp	Leu	Gln	Ser	Ile	Ile	Tyr	Lys
				85					90					95	
Leu	Glu	Glu	His	Glu	Glu	Phe	Phe	Pro	Ala	Phe	Gln	Ala	Phe	Thr	Asn
			100					105					110		
Asp	Leu	Leu	Glu	Ile	Leu	Glu	Ile	Asp	Asp	Ser	Gly	Cys	His	Cys	Thr
		115				120					125				
Cys	Ser	Lys	Glu	Ile	Lys	Ser	Thr	Phe	Ile	Leu	Lys	Thr	Asn	Gln	Ile
	130					135					140				
Ile	Phe	Thr	Val												
145															

<210> 3403

<211> 1696

<212> DNA

<213> Homo sapiens

<400> 3403

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120
accatggccc gaaatgcaga aaaggccatg acggccttag caagatttcg ccaggctcag
180
ctggaagagg gaaaagtga ggaacgaaga ccctttcttg cctcagaatg tactgaactg
240
cctaaagctg agaagtggag acgacagatc attggagaga tctctaaaaa agtggctcag
300
attcagaatg ctggttttagg tgaatttcga attcgtgacc tgaatgatga aattaacaag
360
ctgctaaggg agaaaggaca ctgggaggtc cggataaagg agctgggagg tcttgattat
420
ggaaaagttg gccctaaaat gctggatcat gaaggaaaag aagtcaccagg aaaccgaggt
480
tacaagtact ttggagcagc aaaagatttg cctggtgtta gagagctgtt tgaaaaanga
540
acctcttctt cctcccagnn aaagacacgt gctgagctca tgaaggcaat cgattttgag
600
tactatggtt acctagatga agatgatggt gttattgtgc ctttggaaca ggaatatgaa
660
aagaaactca gagccgagtt agtggaaaag tggaaagcag agagagaggc tcggctggca
720
agaggagaaa aggaagagga ggaggaagag gaggaagaga tcaacatcta tgcagtcacc
780
gaggaggagt cggacgagga aggcagccag gagaaaggag gggacgacag ccagcagaag
840
ttcattgctc acgtccctgt tccctcgag caagagattg aggaggcact ggtgcgaagg
900
aagaaaatgg aactcctcca gaagtatgca agcgagaccc tgcaggccca aagtgaagaa
960
gccagaaggc tcctggggta ttaggaccca gctggggctc tccttgaggt tcttccatcc
1020
cccagtggta cctcaggacc cagggctgca gacacaggct ggtgctgcaa gggctcctgc
1080
cccattctca gccttcttc cctctccttg tctcatgttg accggagggt aggggtctgt
1140
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1200
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1260
actgccattt tgaggggaga agaatcaatt agtggcaaac atttaaaaaat gcaatttttt
1320
gcagaccaa gtataatttt aaaaaatgca aattttctaa aagacacatc tcttgaaaaa
1380
tgagatgatg tggccaggcg cagtggctca cgctgtaac ccagcactt tgggaggccg
1440
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1500

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 1560
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 1680
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<210> 3404

<211> 286

<212> PRT

<213> Homo sapiens

<400> 3404

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Gln	Ala	Gln	Leu	Glu	Glu	Gly	Lys	Val	Lys	Glu	Arg	Arg	Pro	Phe	Leu
			20					25					30		
Ala	Ser	Glu	Cys	Thr	Glu	Leu	Pro	Lys	Ala	Glu	Lys	Trp	Arg	Arg	Gln
		35					40					45			
Ile	Ile	Gly	Glu	Ile	Ser	Lys	Lys	Val	Ala	Gln	Ile	Gln	Asn	Ala	Gly
	50					55					60				
Leu	Gly	Glu	Phe	Arg	Ile	Arg	Asp	Leu	Asn	Asp	Glu	Ile	Asn	Lys	Leu
65				70					75					80	
Leu	Arg	Glu	Lys	Gly	His	Trp	Glu	Val	Arg	Ile	Lys	Glu	Leu	Gly	Gly
				85					90					95	
Pro	Asp	Tyr	Gly	Lys	Val	Gly	Pro	Lys	Met	Leu	Asp	His	Glu	Gly	Lys
			100					105					110		
Glu	Val	Pro	Gly	Asn	Arg	Gly	Tyr	Lys	Tyr	Phe	Gly	Ala	Ala	Lys	Asp
		115				120						125			
Leu	Pro	Gly	Val	Arg	Glu	Leu	Phe	Glu	Lys	Xaa	Thr	Ser	Ser	Ser	Ser
	130					135					140				
Gln	Xaa	Lys	Thr	Arg	Ala	Glu	Leu	Met	Lys	Ala	Ile	Asp	Phe	Glu	Tyr
145				150					155					160	
Tyr	Gly	Tyr	Leu	Asp	Glu	Asp	Asp	Gly	Val	Ile	Val	Pro	Leu	Glu	Gln
			165					170					175		
Glu	Tyr	Glu	Lys	Lys	Leu	Arg	Ala	Glu	Leu	Val	Glu	Lys	Trp	Lys	Ala
		180						185					190		
Glu	Arg	Glu	Ala	Arg	Leu	Ala	Arg	Gly	Glu	Lys	Glu	Glu	Glu	Glu	Glu
	195						200					205			
Glu	Glu	Glu	Glu	Ile	Asn	Ile	Tyr	Ala	Val	Thr	Glu	Glu	Glu	Ser	Asp
	210					215					220				
Glu	Glu	Gly	Ser	Gln	Glu	Lys	Gly	Gly	Asp	Asp	Ser	Gln	Gln	Lys	Phe
225				230					235					240	
Ile	Ala	His	Val	Pro	Val	Pro	Ser	Gln	Gln	Glu	Ile	Glu	Glu	Ala	Leu
			245					250						255	
Val	Arg	Arg	Lys	Lys	Met	Glu	Leu	Leu	Gln	Lys	Tyr	Ala	Ser	Glu	Thr
		260					265						270		
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	275						280						285		

<210> 3405

<211> 402

<212> DNA
<213> Homo sapiens

<400> 3405
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120
aacctgctcg cctccatccg taagggcaat gccattgacg aagcggacat cccgccgcca
180
gtggccatag gaaaaggccc ggcgtccacg cctacctaca gccctgcacc caccagccg
240
gccctagaa tcgcgtcagc cccagagccc agggtcaccc tggagggacc ttctgccacc
300
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360
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402

<210> 3406
<211> 134
<212> PRT
<213> Homo sapiens

<400> 3406
Gly Trp Glu Ala Pro Leu Gln Glu Arg Leu Ala Phe Tyr Gln Thr Ala
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Ile Glu Ser Ala Arg Gln Ala Gly Asp Ser Ala Lys Met Arg Arg Tyr
20 25 30
Asp Arg Gly Leu Lys Thr Leu Glu Asn Leu Leu Ala Ser Ile Arg Lys
35 40 45
Gly Asn Ala Ile Asp Glu Ala Asp Ile Pro Pro Pro Val Ala Ile Gly
50 55 60
Lys Gly Pro Ala Ser Thr Pro Thr Tyr Ser Pro Ala Pro Thr Gln Pro
65 70 75 80
Ala Pro Arg Ile Ala Ser Ala Pro Glu Pro Arg Val Thr Leu Glu Gly
85 90 95
Pro Ser Ala Thr Ala Pro Ala Ser Ser Pro Gly Leu Ala Lys Pro Gln
100 105 110
Met Pro Pro Gly Pro Cys Ser Pro Pro Ser Gly Pro Val Ala Glu Pro
115 120 125
Pro Ala Arg Leu Gln Ala
130

<210> 3407
<211> 535
<212> DNA
<213> Homo sapiens

<400> 3407
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tttcccgac accatgcctt ctcggcggtg aggcaggtg cggcaccgac aggcccgggg
120

gggacctttc cggacacccc aacctcctcg gtggcgaggc aggtggcggc accgacaggc
 180
 ccggcgggga cctttcccgg ancacctggc ctccttggca agcaggtggc ggcaccaaca
 240
 ggccccgggg ggacctttcc cggacacctg gcctcctcgg cgaggcaggt ggcagaactg
 300
 gttccacgtc tgatcttcct tagacaaacc tgccttcaga ggaaattgtg ttcaactgga
 360
 gaaactggaa aatgtactag atattggctg atatgaagga tatatgtttt aagtatgata
 420
 attcgatttt ggctctgtag ggaaaggctc ttattttaaa aagatgtgca ctagagaaaa
 480
 aggaaacagc atgtagcaaa tacatccacg gatgtcctcc tggtttaaaa aaaaa
 535

<210> 3408
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 3408
 Gly Met Arg Gly Asp Gly Glu Glu Pro Pro Arg Thr Ala Pro Ser Arg
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 Ser Ala Gly Thr Phe Pro Gly His His Ala Phe Ser Ala Val Arg Gln
 20 25 30
 Val Ala Ala Pro Thr Gly Pro Gly Gly Thr Phe Pro Gly His Pro Thr
 35 40 45
 Ser Ser Val Ala Arg Gln Val Ala Ala Pro Thr Gly Pro Ala Gly Thr
 50 55 60
 Phe Pro Gly Xaa Pro Gly Leu Leu Gly Lys Gln Val Ala Ala Pro Thr
 65 70 75 80
 Gly Pro Gly Gly Thr Phe Pro Gly His Leu Ala Ser Ser Ala Arg Gln
 85 90 95
 Val Ala Glu Leu Val Pro Arg Leu Ile Phe Leu Arg Gln Thr Cys Leu
 100 105 110
 Gln Arg Lys Leu Cys Ser Thr Gly Glu Thr Gly Lys Cys Thr Arg Tyr
 115 120 125
 Trp Leu Ile
 130

<210> 3409
 <211> 959
 <212> DNA
 <213> Homo sapiens

<400> 3409
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 120
 gagagagagg aaccttgccg gtccgaggca gctctgcgcg tcccctcctg cgcttagcat
 180
 cctcggccca gcgcggcccc caccgccatg gaggtgctgg agagcgggga gcagggcgtg
 240

ctgcagtggg accgcaagct gagcgagctg tcagagcccg gggacggcga ggccctcatg
 300
 taccacacgc acttctcaga acttctggat gagttttccc agaacgtctt gggtcagctc
 360
 ctgaatgata ctttctcttc agagaagagt gtgtcaatgg aggtggaacc ttccccgacg
 420
 tccccggcgc ctctcatcca ggctgagcac agctactccc tgtgcgagga gcctcggggc
 480
 cagtcgccct tcacccacat taccaccagt gacagcttca atgacgatga ggtggaaagt
 540
 nngagaaatg gtacctgtct acagacttcc cttcaacatc catcaagaca gagccagtta
 600
 cagacgaacc acccccagga ctcgttccgt ctgtcactct gaccatcaca gccatctcca
 660
 ccncggttg aaaaggagga acctcctctg gaaatgaaca ctgggggttg ttctctgtgc
 720
 cagaccatta ttctaaaaat taagctggag cctcatgaag tggatcagtt tctaaacttc
 780
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 840
 tgggtctaca gagaggggaat atggcgagag agctgggatg agtttgtacc acagatgttg
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<210> 3410

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3410

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Lys	Leu	Ser	Glu	Leu	Ser	Glu	Pro	Gly	Asp	Gly	Glu	Ala	Leu	Met	Tyr
			20					25					30		
His	Thr	His	Phe	Ser	Glu	Leu	Leu	Asp	Glu	Phe	Ser	Gln	Asn	Val	Leu
		35				40						45			
Gly	Gln	Leu	Leu	Asn	Asp	Pro	Phe	Leu	Ser	Glu	Lys	Ser	Val	Ser	Met
	50				55						60				
Glu	Val	Glu	Pro	Ser	Pro	Thr	Ser	Pro	Ala	Pro	Leu	Ile	Gln	Ala	Glu
65				70						75				80	
His	Ser	Tyr	Ser	Leu	Cys	Glu	Glu	Pro	Arg	Ala	Gln	Ser	Pro	Phe	Thr
				85					90					95	
His	Ile	Thr	Thr	Ser	Asp	Ser	Phe	Asn	Asp	Asp	Glu	Val	Glu	Ser	Xaa
			100					105					110		
Arg	Asn	Gly	Thr	Cys	Leu	Gln	Thr	Ser	Leu	Gln	His	Pro	Ser	Arg	Gln
		115				120					125				
Ser	Gln	Leu	Gln	Thr	Asn	His	Pro	Gln	Asp	Ser	Phe	Arg	Leu	Ser	Leu
		130				135						140			

<210> 3411

<211> 958

<212> DNA

<213> Homo sapiens

<400> 3411

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120
cgacggcctc cacagtccgg agcccggcgg agcccggacc tggcggggag agctgcctcc
180
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240
cggcaatggg cttegtatcc tccagtgcac ttgtaactga cttggacacg gaataactaag
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360
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420
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480
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540
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660
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720
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780
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840
ccacaagcac aaactgacca agcacagagt caccagtttc catatgtaat gcaaggaaat
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958

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<210> 3412

<211> 185

<212> PRT

<213> Homo sapiens

<400> 3412

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20           25           30
Thr Val Gly Lys Leu Lys Thr His Leu Ser Asn Val Tyr Pro Ser Lys
35           40           45
Pro Leu Thr Lys Asp Gln Arg Leu Val Tyr Ser Gly Arg Leu Leu Pro
50           55           60
Asp His Leu Gln Leu Lys Asp Ile Leu Arg Lys Gln Asp Glu Tyr His
65           70           75           80
Met Val His Leu Val Cys Thr Ser Arg Thr Pro Pro Ser Ser Pro Lys
85           90           95
Ser Ser Thr Asn Arg Glu Ser His Glu Ala Leu Ala Ser Ser Ser Asn

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			100					105					110						
Ser	Ser	Ser	Asp	His	Ser	Gly	Ser	Thr	Thr	Pro	Ser	Ser	Gly	Gln	Glu				
		115						120					125						
Thr	Leu	Ser	Leu	Ala	Val	Gly	Ser	Ser	Ser	Glu	Gly	Leu	Arg	Gln	Arg				
		130				135							140						
Thr	Leu	Pro	Gln	Ala	Gln	Thr	Asp	Gln	Ala	Gln	Ser	His	Gln	Phe	Pro				
145					150					155					160				
Tyr	Val	Met	Gln	Gly	Asn	Val	Asp	Asn	Gln	Phe	Pro	Gly	Gln	Ala	Ala				
			165						170					175					
Pro	Pro	Gly	Phe	Pro	Val	Tyr	Pro	Ala											
			180					185											

<210> 3413

<211> 3344

<212> DNA

<213> Homo sapiens

<400> 3413

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180
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300
tagataagcc tgaagaaaaa agaataagcc tgagtatgta ttttaggtgt ccaactatcc
360
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420
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480
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600
cagcagttga acccaggctt tcagctttct tttgcatcat ctggcccaag tgtgttgctt
660
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720
aagggccaaa ctgcatatca taagacagga tctactcagc tcttctgctc cacacgatgc
780
atcaccagac attcttcacc tgcttgctg ccacctctc ccaagaaaac ctgcacaaac
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900
cctagcaaag atttctgcag ccaatcatgc ttgtcatctt atgagctaaa gaaaaaacct
960
gttggtacca tatatacaa aagcatttca actaagtgca gtatgtgtca gaagaatgct
1020
gatactcgat ttgaagttaa atatcaaaat gtggtacatg gtctttgtag tgatgcctgt
1080

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1140
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1200
acggcataca agcagaattc tgcccaaatt cctccatatg ccctggggaa gtcattgaga
1260
tcctcagcag aaatgattga aaataccaat agcttgggga agacagagct tttctgttct
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1560
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<211> 723

<212> PRT

<213> Homo sapiens

<400> 3414

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<210> 3415

<211> 3501

<212> DNA

<213> Homo sapiens

<400> 3415

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<210> 3416

<211> 259

<212> PRT

<213> Homo sapiens

<400> 3416

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		20					25					30			
Asn	Pro	Ala	Phe	Lys	Pro	Val	Leu	Ala	Ile	Ile	Gln	Ala	Gly	Asp	Asp
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Asn	Ile	Thr	His	Ile	Cys	Leu	Pro	Pro	Asp	Ser	Ser	Glu	Ala	Glu	Ile
65			70						75				80		
Ile	Asp	Glu	Ile	Leu	Lys	Ile	Asn	Glu	Asp	Thr	Arg	Val	His	Gly	Leu
		85					90					95			
Ala	Leu	Gln	Ile	Ser	Glu	Asn	Leu	Phe	Ser	Asn	Lys	Val	Leu	Asn	Ala
		100					105					110			
Leu	Lys	Pro	Glu	Lys	Asp	Val	Asp	Gly	Val	Thr	Asp	Ile	Asn	Leu	Gly
	115				120						125				
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      165              170              175
Leu Gln Cys Leu Phe Gln Arg Lys Gly Ser Met Thr Met Ser Ile Gln
      180              185              190
Trp Lys Thr Arg Gln Leu Gln Ser Lys Leu His Glu Ala Asp Ile Val
      195              200              205
Val Leu Gly Ser Pro Lys Pro Glu Glu Ile Pro Leu Thr Trp Ile Gln
      210              215              220
Pro Gly Thr Thr Val Leu Asn Cys Ser His Asp Phe Leu Ser Gly Lys
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<210> 3417
<211> 405
<212> DNA
<213> Homo sapiens

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180
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300
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405

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<210> 3418
<211> 94
<212> PRT
<213> Homo sapiens

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      20      25      30
Ile Phe Arg Ser Leu His Thr Leu Val Gly Gln Leu Asp Leu Arg Asp
      35      40      45
Asp Val Val Lys Ile Thr Ile Asp Trp Asn Lys Leu Gln Ser Leu Ser
      50      55      60
Ala Phe Gln Pro Ala Leu Leu Phe Ser Ala Leu Glu Gln His Ile Leu

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65 70 75
Tyr Leu Gln Val Asn Phe Leu Leu Glu Met Ile Thr Arg Tyr
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<210> 3419
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<212> DNA
<213> Homo sapiens
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418
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<213> Homo sapiens
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Ile	Asp	Val	Asp	Pro	Gly	Glu	Met	Gln	Thr	Ser	Val	His	Asn	Gly	Thr
			20					25					30		
Cys	Cys	Leu	Ala	Leu	Lys	Ala	His	Arg	Arg	Pro	Cys	Val	His	Leu	His
		35					40					45			
Cys	Asp	Thr	Val	Ala	Leu	Glu	Ser	Thr	Thr	Leu	Arg	Gly	Thr	Thr	Arg
	50					55					60				
Glu	Val	Thr	Arg	Arg	Ser	Pro	Ile	Asn	Met	Lys	His	Pro	Glu	Gln	Gly
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Glu	Pro	Gly	Gly	Pro	Ala	Asp	Gln	Trp	Val	Pro	Arg	Arg	Glu	Trp	Ala
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<211> 2988
<212> DNA
<213> Homo sapiens
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<210> 3422

<211> 418

<212> PRT

<213> Homo sapiens

<400> 3422

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Phe	Ser	Ser	Lys	Thr	Val	Thr	Val	Leu	Leu	Leu	Ala	Gln	Thr	Thr	Cys		
		35					40					45					
Leu	Leu	Leu	Phe	Ile	Ile	Ser	Arg	Pro	Gly	Pro	Ser	Ser	Pro	Ala	Gly		
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Gly	Glu	Asp	Arg	Val	His	Val	Leu	Val	Leu	Ser	Ser	Trp	Arg	Ser	Gly		
65					70					75					80		
Ser	Ser	Phe	Leu	Gly	Gln	Leu	Phe	Ser	Gln	His	Pro	Asp	Val	Phe	Tyr		
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His	Cys	Arg	Leu	Leu	Cys	Ser	Gln	Gln	Pro	Phe	Glu	Val	Val	Glu	Lys		
			180					185					190				
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	195						200					205					
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	210					215					220						
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225					230					235					240		
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				245					250						255		
Thr	Asn	Gly	Lys	Trp	Val	Glu	Ala	Asp	Pro	His	Leu	Arg	Leu	Ile	Arg		
			260					265					270				
Glu	Val	Cys	Arg	Ser	His	Val	Arg	Ile	Ala	Glu	Ala	Ala	Thr	Leu	Lys		
		275					280					285					
Pro	Pro	Pro	Phe	Leu	Arg	Gly	Arg	Tyr	Arg	Leu	Val	Arg	Phe	Glu	Asp		
	290					295					300						
Leu	Ala	Arg	Glu	Pro	Leu	Ala	Glu	Ile	Arg	Ala	Leu	Tyr	Ala	Phe	Thr		
305					310					315					320		
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<210> 3423
<211> 1851
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<212> DNA

<213> Homo sapiens

<400> 3423

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<210> 3424

<211> 136

<212> PRT

<213> Homo sapiens

<400> 3424

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Gln	Arg	Trp	Val	Ile	Gly	Arg	Cys	Leu	Cys	Val	Pro	Glu	Arg	Ser	Leu
			20					25					30		
Ala	Ser	Tyr	Gly	Val	Arg	Gln	Asp	Gly	Asp	Pro	Ala	Phe	Leu	Tyr	Leu
		35				40					45				
Leu	Ser	Ala	Pro	Arg	Glu	Ala	Pro	Ala	Thr	Gly	Pro	Ser	Pro	Gln	His
	50					55				60					
Pro	Gln	Lys	Met	Asp	Gly	Glu	Leu	Gly	Arg	Leu	Phe	Pro	Pro	Ser	Leu
65					70				75					80	
Gly	Leu	Pro	Pro	Gly	Pro	Gln	Pro	Ala	Ala	Ser	Ser	Leu	Pro	Ser	Pro
				85				90					95		
Leu	Gln	Pro	Ser	Trp	Ser	Cys	Pro	Ser	Cys	Thr	Phe	Ile	Asn	Ala	Pro
		100					105					110			
Asp	Arg	Pro	Gly	Cys	Glu	Met	Cys	Ser	Thr	Gln	Arg	Pro	Cys	Thr	Trp
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<210> 3425

<211> 1416

<212> DNA

<213> Homo sapiens

<400> 3425

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<210> 3426

<211> 410

<212> PRT

<213> Homo sapiens

<400> 3426

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 Arg Lys Ala Ala Ser Pro Gly Ala Pro Arg Pro Trp Pro Arg His Ser
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 Thr His Met Ala Ser Gly Val Gly Ala Ala Phe Glu Glu Leu Pro His

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Asp	Gly	Thr	Cys	Asp	Glu	Cys	Glu	Pro	Asp	Glu	Ala	Pro	Gly	Ala	Glu
				85					90					95	
Glu	Val	Cys	Arg	Glu	Cys	Gly	Phe	Cys	Tyr	Cys	Arg	Arg	His	Ala	Glu
			100					105					110		
Ala	His	Arg	Gln	Lys	Phe	Leu	Ser	His	His	Leu	Ala	Glu	Tyr	Val	His
		115					120					125			
Gly	Ser	Gln	Ala	Trp	Thr	Pro	Pro	Ala	Asp	Gly	Glu	Gly	Ala	Gly	Lys
	130					135					140				
Glu	Glu	Ala	Glu	Val	Lys	Val	Glu	Gln	Glu	Arg	Glu	Ile	Glu	Ser	Glu
145					150					155					160
Ala	Gly	Glu	Glu	Ser	Glu	Ser	Glu	Glu	Glu	Ser	Glu	Ser	Glu	Glu	Glu
				165					170					175	
Ser	Glu	Thr	Glu	Glu	Glu	Ser	Glu	Asp	Glu	Ser	Asp	Glu	Glu	Ser	Glu
			180					185					190		
Glu	Asp	Ser	Glu	Glu	Glu	Met	Glu	Asp	Glu	Gln	Glu	Ser	Glu	Ala	Glu
		195				200						205			
Glu	Asp	Asn	Gln	Glu	Glu	Gly	Glu	Ser	Glu	Ala	Glu	Gly	Glu	Thr	Glu
	210					215					220				
Ala	Glu	Ser	Glu	Phe	Asp	Pro	Glu	Ile	Glu	Met	Glu	Ala	Glu	Arg	Val
225					230					235					240
Ala	Lys	Arg	Lys	Cys	Pro	Asp	His	Gly	Leu	Asp	Leu	Ser	Thr	Tyr	Cys
			245					250						255	
Gln	Glu	Asp	Arg	Gln	Leu	Ile	Cys	Val	Leu	Cys	Pro	Val	Ile	Gly	Ala
		260					265					270			
His	Gln	Gly	His	Gln	Leu	Ser	Thr	Leu	Asp	Glu	Ala	Phe	Glu	Glu	Leu
		275					280					285			
Arg	Ser	Lys	Asp	Ser	Gly	Gly	Leu	Lys	Ala	Ala	Met	Ile	Glu	Leu	Val
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Glu	Arg	Leu	Lys	Phe	Lys	Ser	Ser	Asp	Pro	Lys	Val	Thr	Arg	Asp	Gln
305					310					315					320
Met	Lys	Met	Phe	Ile	Gln	Gln	Glu	Phe	Lys	Lys	Val	Gln	Lys	Val	Ile
			325					330						335	
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	355						360					365			
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	370					375					380				
Thr	Ser	Asn	Glu	Ser	Ala	Glu	Pro	Lys	Ala	Glu	Gly	Asp	Glu	Glu	Gly
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<210> 3427

<211> 580

<212> DNA

<213> Homo sapiens

<400> 3427

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120

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<210> 3428

<211> 132

<212> PRT

<213> Homo sapiens

<400> 3428

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			20					25					30		
Met	Glu	Thr	Glu	Asp	Cys	Glu	Lys	Met	Ser	Asn	Met	Gly	Thr	Leu	Asn
		35					40					45			
Ser	Ser	Met	Leu	His	Arg	Ser	Ala	Glu	Ser	Leu	Lys	Ser	Leu	Ser	Ser
		50				55					60				
Glu	Leu	Cys	Pro	Glu	Lys	Ile	Leu	Pro	Glu	Glu	Lys	Pro	Val	His	Leu
65					70					75					80
Pro	Val	Leu	Arg	Arg	Ser	Lys	Ser	Gln	Ser	Arg	Pro	Gln	Gln	Val	Lys
			85					90						95	
Phe	Ser	Asp	Asp	Val	Ile	Asp	Asn	Gly	Asn	Tyr	Asp	Ile	Glu	Ile	Arg
		100					105						110		
Gln	Pro	Pro	Met	Ser	Glu	Arg	Thr	Arg	Arg	Arg	Val	Tyr	Asn	Phe	Glu
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<210> 3429

<211> 634

<212> DNA

<213> Homo sapiens

<400> 3429

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<210> 3430

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3430

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			20					25					30		
Tyr	Thr	Val	Thr	Thr	Val	Thr	Thr	Gln	Gly	Phe	Pro	Leu	Pro	Thr	Gly
		35					40					45			
Gln	His	Ile	Pro	Gly	Cys	Ser	Ala	Gln	Gln	Leu	Pro	Ala	Cys	Ser	Val
	50					55				60					
Met	Phe	Ser	Gly	Gln	His	Tyr	Pro	Leu	Cys	Cys	Leu	Pro	Pro	Pro	Leu
65					70					75					80
Ile	Gln	Ala	Cys	Thr	Met	Gln	Gln	Leu	Pro	Val	Pro	Tyr	Gln	Ala	Tyr
				85				90					95		
Pro	His	Leu	Ile	Ser	Ser	Asp	His	Tyr	Ile	Leu	His	Pro	Pro	Pro	Pro
			100					105					110		
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<210> 3431

<211> 1396

<212> DNA

<213> Homo sapiens

<400> 3431

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 180
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 240

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<211> 296

<212> PRT

<213> Homo sapiens

<400> 3432

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 Phe Leu Gly Leu Ala Leu Val Ser Lys Asp Trp Arg Phe Leu Gln Arg

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Glu Ala Gln Ser Val Leu Arg Ile Leu Ala Glu Arg Asn Arg Pro His		95
	100	105
Gly Gln Met Leu Gly Glu Glu Ala Gln Glu Ala Leu Gln Asp Leu Glu		110
	115	120
Asn Thr Cys Pro Leu Pro Ala Thr Ser Ser Phe Ser Phe Ala Ser Leu		125
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Leu Asn Tyr Arg Asn Ile Trp Lys Asn Leu Leu Ile Leu Gly Phe Thr		140
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Asn Phe Ile Ala His Ala Ile Arg His Cys Tyr Gln Pro Val Gly Gly		160
	165	170
Gly Gly Ser Pro Ser Asp Phe Tyr Leu Cys Ser Leu Leu Ala Ser Gly		175
	180	185
Thr Ala Ala Leu Ala Cys Val Phe Leu Gly Val Thr Val Asp Arg Phe		190
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<212> DNA

<213> Homo sapiens

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<211> 311

<212> PRT

<213> Homo sapiens

<400> 3434

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Gly	Gly	Gly	Gln	Gly	Val	Pro	Val	Val	Ser	Val	Val	Pro	Tyr	Asp	Ser
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	210					215					220						
Ser	Ile	Tyr	Thr	Ile	Leu	Leu	Ser	Arg	Pro	Ser	Pro	Leu	Pro	Tyr	Leu		
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<210> 3435

<211> 1225

<212> DNA

<213> Homo sapiens

<400> 3435

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<212> PRT

<213> Homo sapiens

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		195					200					205			
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	210					215					220				
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225					230					235					240
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<210> 3438

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3438

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<211> 287

<212> PRT

<213> Homo sapiens

<400> 3440

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		20						25					30		
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Thr	Ser	Pro	Met	Pro	Pro	Pro	Ala	Ala	Leu	Arg	Pro	Pro	Ala	Gly	Pro
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Pro	Leu	Trp	Thr	Pro	Thr	Pro	Pro	Ser	Pro	Ala	Ser	Asp	Trp	Pro	Pro
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Thr	Thr	Leu	Ala	Glu	Thr	Leu	Leu	Ile	Pro	Gly	Leu	Glu	Leu	Leu	Gly
225					230					235					240
Gly	Arg	Gln	Ala	Ser	Thr	Pro	Thr	Leu	Gly	Asn	Ala	Glu	Pro	Leu	Arg
			245						250					255	
Met	Cys	Ala	Arg	Gly	Arg	Val	Cys	Val	Phe	Leu	Arg	Val	Ser	Leu	Phe

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<210> 3441

<211> 2074

<212> DNA

<213> Homo sapiens

<400> 3441

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1320

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2074

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<210> 3442

<211> 374

<212> PRT

<213> Homo sapiens

<400> 3442

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          20          25          30
Ala Glu Leu Leu Met Ser Leu His Asp Leu Asp Val Gly Glu Ile Cys
          35          40          45
Thr Val Asp Pro Cys His Lys Phe Thr Trp Cys Leu Asp Ala Cys Ile
          50          55          60
Arg Glu Arg Phe Val Asp Ser Lys Arg Ala Arg Glu Leu Gln Gly Phe
65          70          75          80
Leu Asp Asp Val Lys Lys Gly Gln Glu Gln Val Leu Gly Asp Leu Ser
          85          90          95
Met Ile Leu Cys Asp Pro Phe Ala Ile Asn Thr Leu Ala Leu Ser Thr
          100         105         110
Val Arg His Leu Gln Glu Leu Val Gly Gln Glu Thr Leu Pro Arg Asp
          115         120         125
Ser Pro Asp Leu Leu Leu Leu Leu Arg Leu Leu Ala Leu Gly Gln Gly
          130         135         140
Ala Trp Asp Met Ile Asp Ser Gln Val Phe Lys Glu Pro Lys Met Glu
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Val Glu Leu Ile Thr Arg Phe Leu Pro Met Leu Met Ser Phe Leu Val

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<210> 3443
<211> 2070
<212> DNA
<213> Homo sapiens
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<400> 3443
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2070

<210> 3444

<211> 579

<212> PRT

<213> Homo sapiens

<400> 3444

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      20           25           30
Ser Glu Asn Val Glu Lys Ser Lys Ala Tyr Lys Leu Asn Pro Lys Phe
      35           40           45
Cys Ser Leu Ser Phe Gln Ala Thr Lys Cys Lys Leu Ala Gly Leu Glu
      50           55           60
Val Leu Ser Asp Asp Pro Asp Leu Val Lys Val Val Glu Ser Leu Thr
      65           70           75           80
Cys Gly Lys Ile Phe Ala Val Glu Ile Leu Asp Lys Ala Asp Ile Pro
      85           90           95
Leu Val Val Leu Tyr Asp Thr Ser Gly Glu Asp Asp Ile Asn Ile Asn
      100          105          110
Ala Thr Cys Leu Lys Ala Ile Cys Asp Lys Ser Leu Glu Val His Leu
      115          120          125
Gln Val Asp Ala Met Tyr Thr Asn Val Lys Ile Thr Asn Ile Cys Ser
      130          135          140
Asp Gly Thr Leu Tyr Cys Gln Val Pro Cys Lys Gly Leu Asn Lys Leu
      145          150          155          160
Ser Asp Leu Leu Arg Lys Ile Glu Asp Tyr Phe His Cys Lys His Met
      165          170          175
Thr Ser Glu Cys Phe Val Ser Leu Pro Phe Cys Gly Lys Ile Cys Leu
      180          185          190
Phe His Cys Lys Gly Lys Trp Leu Arg Val Glu Ile Thr Asn Val His
      195          200          205
Ser Ser Arg Ala Leu Asp Val Gln Phe Leu Asp Ser Gly Thr Val Thr
      210          215          220
Ser Val Lys Val Ser Glu Leu Arg Glu Ile Pro Pro Arg Phe Leu Gln
      225          230          235          240
Glu Met Ile Ala Ile Pro Pro Gln Ala Ile Lys Cys Cys Leu Ala Asp
      245          250          255
Leu Pro Gln Ser Ile Gly Met Trp Thr Pro Asp Ala Val Leu Trp Leu
      260          265          270
Arg Asp Ser Val Leu Asn Cys Ser Asp Cys Ser Ile Lys Val Thr Lys
      275          280          285
Val Asp Glu Thr Arg Gly Ile Ala His Val Tyr Leu Phe Thr Pro Lys
      290          295          300
Asn Phe Pro Asp Pro His Arg Ser Ile Asn Arg Gln Ile Thr Asn Ala
      305          310          315          320
Asp Leu Trp Lys His Gln Lys Asp Val Phe Leu Ser Ala Ile Ser Ser
      325          330          335
Gly Ala Asp Ser Pro Asn Ser Lys Asn Gly Asn Met Pro Met Ser Gly
      340          345          350
Asn Thr Gly Glu Asn Phe Arg Lys Asn Leu Thr Asp Val Ile Lys Lys
      355          360          365
Ser Met Val Asp His Thr Ser Ala Phe Ser Thr Glu Glu Leu Pro Pro
      370          375          380
Pro Val His Leu Ser Lys Pro Gly Glu His Met Asp Val Tyr Val Pro
      385          390          395          400
Val Ala Cys His Pro Gly Tyr Phe Val Ile Gln Pro Trp Gln Glu Ile

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405 410 415
 His Lys Leu Glu Val Leu Met Glu Glu Met Ile Leu Tyr Tyr Ser Val
 420 425 430
 Ser Glu Glu Arg His Ile Ala Val Glu Lys Asp Gln Val Tyr Ala Ala
 435 440 445
 Lys Val Glu Asn Lys Trp His Arg Val Leu Leu Lys Gly Ile Leu Thr
 450 455 460
 Asn Gly Leu Val Ser Val Tyr Glu Leu Asp Tyr Gly Lys His Glu Leu
 465 470 475 480
 Val Asn Ile Arg Lys Val Gln Pro Leu Val Asp Met Phe Arg Lys Leu
 485 490 495
 Pro Phe Gln Ala Val Thr Ala Gln Leu Ala Gly Val Lys Cys Asn Gln
 500 505 510
 Trp Ser Glu Glu Ala Ser Met Val Phe Arg Asn His Val Glu Lys Lys
 515 520 525
 Pro Leu Val Ala Leu Val Gln Thr Val Ile Glu Asn Ala Asn Pro Trp
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<210> 3445

<211> 2086

<212> DNA

<213> Homo sapiens

<400> 3445

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 660
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 720

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2040
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2086

<210> 3446

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3446

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20	25	30	
Met Asp Asp Glu Phe Gln Leu Leu Gln Arg Asn Phe Met Asp Lys Tyr			
35	40	45	
Tyr Leu Glu Phe Glu Asp Thr Glu Glu Asn Lys Leu Ile Tyr Thr Pro			
50	55	60	
Ile Phe Asn Glu Tyr Ile Ser Leu Val Glu Lys Tyr Ile Glu Glu Gln			
65	70	75	80
Leu Leu Gln Arg Ile Pro Glu Phe Asn Met Ala Ala Phe Thr Thr Thr			
85	90	95	
Leu His His Leu Phe Arg Leu Arg His His Lys Asp Glu Val Ala Gly			
100	105	110	
Asp Ile Phe Asp Met Leu Leu Thr Phe Thr Asp Phe Leu Ala Phe Lys			
115	120	125	
Glu Met Phe Leu Asp Tyr Arg Ala Glu Lys Glu Gly Arg Gly Leu Asp			
130	135	140	
Leu Ser Ser Gly Leu Val Val Thr Ser Leu Cys Lys Ser Ser Ser Leu			
145	150	155	160
Pro Ala Ser Gln Asn Asn Leu Arg His			
165			

<210> 3447

<211> 936

<212> DNA

<213> Homo sapiens

<400> 3447

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780

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<210> 3448

<211> 302

<212> PRT

<213> Homo sapiens

<400> 3448

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			20					25					30		
Leu	Leu	Glu	Gly	Gln	Glu	Pro	Asp	Gly	Val	Arg	Phe	Asp	Arg	Glu	Arg
		35					40					45			
Ala	Arg	Arg	Leu	Trp	Glu	Ala	Val	Ser	Gly	Ala	Gln	Pro	Val	Gly	Arg
	50					55					60				
Glu	Glu	Val	Glu	His	Met	Ile	Gln	Lys	Asn	Gln	Cys	Leu	Phe	Thr	Asn
65				70					75						80
Thr	Gln	Cys	Lys	Val	Cys	Cys	Ala	Leu	Leu	Ile	Ser	Glu	Ser	Gln	Lys
			85					90						95	
Leu	Ala	His	Tyr	Gln	Ser	Lys	Lys	His	Ala	Asn	Lys	Val	Lys	Arg	Tyr
		100						105					110		
Leu	Ala	Ile	His	Gly	Met	Glu	Thr	Leu	Lys	Gly	Glu	Thr	Lys	Lys	Leu
		115					120					125			
Asp	Ser	Asp	Gln	Lys	Ser	Ser	Arg	Ser	Lys	Asp	Lys	Asn	Gln	Cys	Cys
	130					135				140					
Pro	Ile	Cys	Asn	Met	Thr	Phe	Ser	Ser	Pro	Val	Val	Ala	Gln	Ser	His
145				150					155					160	
Tyr	Leu	Gly	Lys	Thr	His	Ala	Lys	Asn	Leu	Lys	Leu	Lys	Gln	Gln	Ser
			165					170					175		
Thr	Lys	Val	Glu	Ala	Leu	His	Gln	Asn	Arg	Glu	Met	Ile	Asp	Pro	Asp
		180					185						190		
Lys	Phe	Cys	Ser	Leu	Cys	His	Ala	Thr	Phe	Asn	Asp	Pro	Val	Met	Ala
	195					200					205				
Gln	Gln	His	Tyr	Val	Gly	Lys	Lys	His	Arg	Lys	Gln	Glu	Thr	Lys	Leu
	210					215					220				
Lys	Leu	Met	Ala	Arg	Tyr	Gly	Arg	Leu	Ala	Asp	Pro	Ala	Val	Thr	Asp
225				230					235					240	
Phe	Pro	Ala	Gly	Lys	Gly	Tyr	Pro	Cys	Lys	Thr	Cys	Lys	Ile	Val	Leu
			245					250					255		
Asn	Ser	Ile	Glu	Gln	Tyr	Gln	Ala	His	Val	Ser	Gly	Phe	Lys	His	Lys
		260					265					270			
Asn	Gln	Ser	Pro	Lys	Thr	Val	Ala	Ser	Ser	Leu	Gly	Gln	Ile	Pro	Met
	275					280						285			
Gln	Arg	Gln	Pro	Ile	Gln	Lys	Asp	Ser	Thr	Thr	Leu	Glu	Asp		
	290					295					300				

<210> 3449

<211> 877

<212> DNA

<213> Homo sapiens

<400> 3449

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300
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360
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720
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780
ggaatcagag atggaaacag aagaagaggt ggatatttta atgagcagtg atatttactc
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<210> 3450

<211> 276

<212> PRT

<213> Homo sapiens

<400> 3450

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Xaa Ile Phe Ser Asn His His His Arg Leu Gln Leu Lys Ala Ala Pro
 1           5           10           15
Ala Ser Ser Asn Pro Pro Gly Ala Pro Ala Leu Pro Leu His Asn Ser
          20           25           30
Ser Val Thr Ala Asn Ser Gln Ser Pro Ala Leu Leu Ala Gly Thr Asn
          35           40           45
Pro Val Ala Val Val Ala Asp Gly Gly Ser Cys Pro Ala His Tyr Pro
          50           55           60
Val His Glu Cys Val Phe Lys Gly Asp Val Arg Arg Leu Ser Ser Leu
65           70           75           80
Ile Arg Thr His Asn Ile Gly Gln Lys Asp Asn His Gly Asn Thr Pro
          85           90           95
Leu His Leu Ala Val Met Leu Gly Asn Lys Glu Cys Ala His Leu Leu

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<210> 3452
<211> 192
<212> PRT
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<213> Homo sapiens

<400> 3452

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Met Glu Ala Val  Pro Leu Pro Ala Lys Glu Glu Arg Gly Met Gly Ala
 1          5          10          15
Leu Ile Ala Thr Asn Thr Thr Glu Asn Ser Thr Arg Glu Glu Val Asn
          20          25          30
Glu Arg Gln Ser His Pro Ala Thr Gln Gln Gln Leu Gly Lys Thr Leu
          35          40          45
Gln Ser Lys Gln Leu Pro Gln Val Pro Arg Pro Leu Gln Leu Phe Ser
          50          55          60
Ala Lys Glu Leu Arg Asp Ser Ser Ile Asp Thr His Gln Tyr His Glu
65          70          75          80
Gly Leu Ser Lys Ala Thr Gln Asp Gln Ile Leu Gln Thr Leu Ile Gln
          85          90          95
Arg Val Arg Arg Gln Asn Leu Leu Ser Val Val Pro Pro Ser Gln Phe
          100          105          110
Asn Phe Ala His Ser Gly Phe Gln Leu Glu Asp Ile Ser Thr Ser Gln
          115          120          125
Arg Phe Met Leu Gly Phe Ala Gly Arg Arg Thr Ser Lys Pro Ala Met
          130          135          140
Ala Gly His Tyr Leu Leu Asn Ile Ser Thr Tyr Gly Arg Gly Ser Glu
145          150          155          160
Ser Phe Arg Arg Thr His Ser Val Asn Pro Glu Asp Arg Phe Cys Leu
          165          170          175
Ser Ser Pro Thr Glu Ala Leu Lys Met Gly Tyr Thr Asn Cys Lys Asn
          180          185          190

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<210> 3453

<211> 477

<212> DNA

<213> Homo sapiens

<400> 3453

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120
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300
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360
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477

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<210> 3454

<211> 159

<212> PRT

<213> Homo sapiens

<400> 3454

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Lys Met Ala Ala Ala Ala Ala Gly Ala Ala Ser Gly Leu Pro Gly
 20          25          30
Pro Val Ala Gln Gly Leu Lys Glu Ala Leu Val Asp Thr Leu Thr Gly
 35          40          45
Ile Leu Ser Pro Val Gln Glu Val Arg Ala Ala Ala Glu Glu Gln Ile
 50          55          60
Lys Val Leu Glu Val Thr Glu Glu Phe Gly Val His Leu Ala Glu Leu
 65          70          75          80
Thr Val Asp Pro Gln Gly Ala Leu Ala Ile Arg Gln Leu Ala Ser Val
 85          90          95
Ile Leu Lys Gln Tyr Val Glu Thr His Trp Cys Ala Gln Ser Glu Lys
100         105         110
Phe Arg Pro Pro Glu Thr Thr Glu Arg Ala Lys Ile Val Ile Arg Glu
115         120         125
Leu Leu Pro Asn Gly Leu Arg Glu Ser Ile Ser Lys Val Arg Ser Ser
130         135         140
Val Ala Tyr Ala Val Ser Ala Ile Ala His Trp Asp Trp Pro Glu
145         150         155

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<210> 3455

<211> 4886

<212> DNA

<213> Homo sapiens

<400> 3455

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120
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180
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480
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600
agggagaagt tacgggaagg gagagatgcc tcccgtcat tgaatgagca tctccaggcc
660
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720

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<210> 3456

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3456

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Lys	Lys	Gln	Arg	Arg	Arg	Gly	Arg	Lys	Glu	Gly	Glu	Glu	Asp	Gln	Asn
			20					25					30		
Pro	Pro	Cys	Pro	Arg	Leu	Asn	Gly	Val	Leu	Met	Glu	Val	Glu	Glu	Pro
		35					40					45			
Glu	Val	Leu	Gln	Asp	Ser	Leu	Asp	Arg	Cys	Tyr	Ser	Thr	Pro	Ser	Met
	50					55					60				
Tyr	Phe	Glu	Leu	Pro	Asp	Ser	Phe	Gln	His	Tyr	Arg	Ser	Val	Phe	Tyr
65					70				75					80	
Ser	Phe	Glu	Glu	Glu	His	Ile	Ser	Phe	Ala	Leu	Tyr	Val	Asp	Asn	Arg
				85					90					95	
Phe	Phe	Thr	Leu	Thr	Val	Thr	Ser	Leu	His	Leu	Val	Phe	Gln	Met	Gly
			100					105					110		
Val	Ile	Phe	Pro	Gln											

115

<210> 3457

<211> 646

<212> DNA

<213> Homo sapiens

<400> 3457

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540
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<210> 3458

<211> 61

<212> PRT

<213> Homo sapiens

<400> 3458

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Thr Arg Asp Phe Val Ser Met Ser Arg Cys Pro Cys Ala Cys Val Cys
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Arg Cys Val Xaa Val Pro Gly Cys Val Cys Ala Cys Val Cys Val Asp
20           25           30
Ile Cys Ala Cys Leu Phe Thr His Arg Trp Glu Cys Arg Val Cys Ile
35           40           45
Leu Cys Xaa Cys Thr Cys Thr Gln Ala Xaa Ala Gly Lys
50           55           60

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<210> 3459

<211> 592

<212> DNA

<213> Homo sapiens

<400> 3459

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<210> 3460
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 3460
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 Gly Pro Ser Leu Cys Ala Ala Ser Val Cys Leu Leu Gln Asn Lys His
 35 40 45
 His Ala Pro Ser Trp Ala Glu Ala Pro Ala Asp Ser Pro Arg Ala Leu
 50 55 60
 Gln Ala Cys Pro Val Leu Cys Gln Ala Gly Pro Gly His Val Pro Ala
 65 70 75 80
 Pro Gly Ala Gly Leu Gln Arg Gly Gln Trp Ser Ala Leu Lys Thr Val
 85 90 95
 Ile Pro Ala Arg Pro Ala Leu Pro Cys Ser Ala Arg Gly Gln Phe Glu
 100 105 110
 Leu Lys Leu
 115

<210> 3461
 <211> 474
 <212> DNA
 <213> Homo sapiens

<400> 3461
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 180

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 360
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<210> 3462

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3462

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Leu	Leu	Gly	Gly	His	Trp	Leu	Arg	Ala	Gln	Gly	Tyr	Ala	Asn	Pro	Phe
			20					25					30		
Trp	Leu	Ala	Leu	Ala	Leu	Leu	Ile	Ala	Met	Thr	Leu	Tyr	Ala	Ala	Phe
		35					40					45			
Cys	Phe	Gly	Glu	Thr	Leu	Lys	Glu	Pro	Lys	Ser	Thr	Arg	Leu	Phe	Thr
	50					55					60				
Phe	Arg	His	His	Arg	Ser	Ile	Val	Gln	Leu	Tyr	Val	Ala	Pro	Ala	Pro
65					70				75					80	
Glu	Lys	Ser	Arg	Lys	His	Leu	Ala	Leu	Tyr	Ser	Leu	Ala	Ile	Phe	Val
				85					90					95	
Val	Ile	Thr	Val	His											
				100											

<210> 3463

<211> 1734

<212> DNA

<213> Homo sapiens

<400> 3463

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 420
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<210> 3464

<211> 434

<212> PRT

<213> Homo sapiens

<400> 3464

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Leu	Glu	Asp	Pro	Ala	Val	Pro	Arg	Leu	Thr	Ala	Ala	Leu	Pro	Ala
			20					25				30		
Glu	Leu	Pro	Glu	Arg	Arg	Arg	Arg	Gln	Gln	Arg	Gln	Gly	Lys	His

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Pro Asn Tyr Leu Met Ala	Asn Glu Arg Met Asn Leu Met Asn Met Ala	
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Lys Leu Ser Ile Lys Gly Leu Ile Glu Ser Ala Leu Asn Leu Gly Arg		
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Thr Leu Asp Ser Asp Tyr Ala Pro Leu Gln Gln Phe Phe Val Val Met		
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Glu His Cys Leu Lys His Gly Leu Lys Ala Lys Lys Thr Phe Leu Gly		
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Gln Asn Lys Ser Phe Trp Gly Pro Leu Glu Leu Val Glu Lys Leu Val		
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Pro Glu Ala Ala Glu Ile Thr Ala Ser Val Lys Asp Leu Pro Gly Leu		
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Lys Thr Pro Val Gly Arg Gly Arg Ala Trp Leu Arg Leu Ala Leu Met		
145	150	155
Gln Lys Lys Leu Ser Glu Tyr Met Lys Ala Leu Ile Asn Lys Lys Glu		
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Leu Leu Ser Glu Phe Tyr Glu Pro Asn Ala Leu Met Met Glu Glu Glu		
180	185	190
Gly Ala Ile Ile Ala Gly Leu Leu Val Gly Leu Asn Val Ile Asp Ala		
195	200	205
Asn Phe Cys Met Lys Gly Glu Asp Leu Asp Ser Gln Val Gly Val Ile		
210	215	220
Asp Phe Ser Met Tyr Leu Lys Asp Gly Asn Ser Ser Lys Gly Thr Glu		
225	230	235
Gly Asp Gly Gln Ile Thr Ala Ile Leu Asp Gln Lys Asn Tyr Val Glu		
245	250	255
Glu Leu Asn Arg His Leu Asn Ala Thr Val Asn Asn Leu Gln Ala Lys		
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Val Asp Ala Leu Glu Lys Ser Asn Thr Lys Leu Thr Glu Glu Leu Ala		
275	280	285
Val Ala Asn Asn Arg Ile Ile Thr Leu Gln Glu Glu Met Glu Arg Val		
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Lys Glu Glu Ser Ser Tyr Ile Leu Glu Ser Asn Arg Lys Gly Pro Lys		
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Gln Asp Arg Thr Ala Glu Gly Gln Ala Leu Ser Glu Ala Arg Lys His		
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Leu Lys Glu Glu Thr Gln Leu Arg Leu Asp Val Glu Lys Glu Leu Glu		
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Met Gln Ile Ser Met Arg Gln Glu Met Glu Leu Ala Met Lys Met Leu		
355	360	365
Glu Lys Asp Val Cys Glu Lys Gln Asp Ala Leu Val Ser Leu Arg Gln		
370	375	380
Gln Leu Asp Asp Leu Arg Ala Leu Lys His Glu Leu Ala Phe Lys Leu		
385	390	395
Gln Ser Ser Asp Leu Gly Val Lys Gln Lys Ser Glu Leu Asn Ser Arg		
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<210> 3465

<211> 2904

<212> DNA

<213> Homo sapiens

<400> 3465

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<210> 3466

<211> 315

<212> PRT

<213> Homo sapiens

<400> 3466

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Gly Arg His Arg Lys Leu Pro Glu Asn Trp Thr Asp Thr Arg Glu Thr
          35           40           45
Leu Leu Glu Gly Met Leu Phe Ser Leu Lys Tyr Leu Gly Met Thr Leu
          50           55           60
Val Glu Gln Pro Lys Gly Glu Glu Leu Ser Ala Ala Ala Ile Lys Arg
65           70           75           80
Ile Val Ala Thr Ala Lys Ala Ser Gly Lys Lys Leu Gln Lys Val Thr
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Leu Lys Val Ser Pro Arg Gly Ile Ile Leu Thr Asp Asn Leu Thr Asn
          100          105          110
Gln Leu Ile Glu Asn Val Ser Ile Tyr Arg Ile Ser Tyr Cys Thr Ala
          115          120          125
Asp Lys Met His Asp Lys Val Phe Ala Tyr Ile Ala Gln Ser Gln His
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Asn Gln Ser Leu Glu Cys His Ala Phe Leu Cys Thr Lys Arg Lys Met
145          150          155          160
Ala Gln Ala Val Thr Leu Thr Val Ala Gln Ala Phe Lys Val Ala Phe
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Glu Phe Trp Gln Val Ser Lys Glu Glu Lys Glu Lys Arg Asp Lys Ala
          180          185          190
Ser Gln Glu Gly Gly Asp Val Leu Gly Ala Arg Gln Asp Cys Thr Pro
          195          200          205
Pro Leu Lys Ser Leu Val Ala Thr Gly Asn Leu Leu Asp Leu Glu Glu
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Thr Ala Lys Ala Pro Leu Ser Thr Val Ser Ala Asn Thr Thr Asn Met
225          230          235          240
Asp Glu Val Pro Arg Pro Gln Ala Leu Ser Gly Ser Ser Val Val Trp
          245          250          255
Glu Leu Asp Asp Gly Leu Asp Glu Ala Phe Ser Arg Leu Ala Gln Ser
          260          265          270
Arg Thr Asn Pro Gln Val Leu Asp Thr Gly Leu Thr Ala Gln Asp Met
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His Tyr Ala Gln Cys Leu Ser Pro Val Asp Trp Asp Lys Pro Asp Ser
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<210> 3467

<211> 638

<212> DNA

<213> Homo sapiens

<400> 3467

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180

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<210> 3468

<211> 88

<212> PRT

<213> Homo sapiens

<400> 3468

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Tyr	Asp	Phe	Pro	Pro	Leu	Cys	Met	Ser	Gly	Leu	His	Asp	Phe	Gln	Phe
			20					25					30		
Trp	Leu	Cys	Tyr	Thr	Ser	Cys	Tyr	Gln	Gln	Asn	Arg	Val	Ser	Leu	Gly
		35					40					45			
Gln	Ser	Cys	Gly	Tyr	Thr	Ser	Val	Ser	Gln	Asp	Phe	Leu	Cys	Gln	Arg
		50				55					60				
Ala	Val	Lys	Leu	Arg	Thr	Lys	Val	Ile	Lys	Ile	Gln	Leu	Tyr	Tyr	Trp
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<210> 3469

<211> 1710

<212> DNA

<213> Homo sapiens

<400> 3469

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<210> 3470

<211> 322

<212> PRT

<213> Homo sapiens

<400> 3470

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Pro	Asp	Glu	Asp	Leu	Ser	His	Arg	Asn	Lys	Glu	Pro	Pro	Ala	Pro	Ala
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Phe	Ile	Ala	Ala	Ile	Met	Ala	Met	Arg	Tyr	Asn	Arg	Leu	Thr	Val	Leu
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Ala	Gly	Ala	Met	Leu	Ala	Leu	Gly	Leu	Met	Thr	Cys	Leu	Ser	Val	Leu
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Phe	Gly	Tyr	Ala	Thr	Thr	Val	Ile	Pro	Arg	Val	Tyr	Thr	Tyr	Tyr	Val
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Ser	Thr	Val	Leu	Phe	Ala	Ile	Phe	Gly	Ile	Arg	Met	Leu	Arg	Glu	Gly
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Leu	Lys	Met	Ser	Pro	Asp	Glu	Gly	Gln	Glu	Glu	Leu	Glu	Glu	Val	Gln
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Ala	Glu	Leu	Lys	Lys	Lys	Asp	Glu	Glu	Phe	Gln	Arg	Thr	Lys	Leu	Leu
		195					200					205			
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		210				215					220				
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				245				250						255	
Val	Leu	Ala	Ala	Arg	Glu	Asp	Pro	Tyr	Gly	Val	Ala	Val	Gly	Gly	Thr
			260					265					270		
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		275					280					285			
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<210> 3471

<211> 2335

<212> DNA

<213> Homo sapiens

<400> 3471

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<210> 3472

<211> 631

<212> PRT

<213> Homo sapiens

<400> 3472

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			20					25					30		
Lys	Val	Cys	Val	Ser	Val	Val	Ser	Glu	Lys	Cys	Arg	Ile	Asp	Thr	Glu
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Ile	Leu	Pro	Ser	Leu	Phe	Met	Arg	Cys	Thr	Thr	Asp	Leu	Asn	Arg	Lys
	50					55					60				
Asp	Lys	Phe	Pro	Ala	Ile	Thr	His	Leu	Lys	Phe	Leu	Ala	Arg	Asp	Met
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Ser	Glu	Gln	Val	Leu	Leu	Cys	Ala	Ser	Ser	Gln	Thr	Ser	Ser	Ile	Val
			85						90					95	
Glu	Cys	Trp	Ser	Leu	Arg	Lys	Glu	Gly	Leu	Pro	Val	Asn	Asn	Ile	Phe
			100					105					110		
Gln	Gln	Ile	Ser	Pro	Val	Val	Gly	Asp	Lys	Gln	Pro	Thr	Ile	Leu	Lys
		115					120					125			
Trp	Arg	Ile	Leu	Ser	Ala	Thr	Asn	Asp	Leu	Asp	Arg	Val	Ser	Ala	Val
	130					135					140				
Ala	Leu	Pro	Lys	Leu	Pro	Ile	Ser	Leu	Thr	Asn	Thr	Asp	Leu	Lys	Val
145					150					155				160	
Ala	Ser	Asp	Thr	Gln	Phe	Tyr	Pro	Gly	Leu	Gly	Leu	Ala	Leu	Ala	Phe
			165					170					175		
His	Asp	Gly	Ser	Val	His	Ile	Val	His	Arg	Leu	Ser	Leu	Gln	Thr	Met
		180						185					190		
Ala	Val	Phe	Tyr	Ser	Ser	Ala	Ala	Pro	Arg	Pro	Val	Asp	Glu	Pro	Ala
		195					200					205			
Met	Lys	Arg	Pro	Arg	Thr	Ala	Gly	Pro	Ala	Val	His	Leu	Lys	Ala	Met
	210					215					220				
Gln	Leu	Ser	Trp	Thr	Ser	Leu	Ala	Leu	Val	Gly	Ile	Asp	Ser	His	Gly

225					230					235					240
Lys	Leu	Ser	Val	Leu	Arg	Leu	Ser	Pro	Ser	Met	Gly	His	Pro	Leu	Glu
				245					250					255	
Val	Gly	Leu	Ala	Leu	Arg	His	Leu	Leu	Phe	Leu	Leu	Glu	Tyr	Cys	Met
			260					265					270		
Val	Thr	Gly	Tyr	Asp	Trp	Trp	Asp	Ile	Leu	Leu	His	Val	Gln	Pro	Ser
		275					280					285			
Met	Val	Gln	Ser	Leu	Val	Glu	Lys	Leu	His	Glu	Glu	Tyr	Thr	Arg	Gln
	290					295					300				
Thr	Ala	Ala	Leu	Gln	Gln	Val	Leu	Ser	Thr	Arg	Ile	Leu	Ala	Met	Lys
305					310					315					320
Ala	Ser	Leu	Cys	Lys	Leu	Ser	Pro	Cys	Thr	Val	Thr	Arg	Val	Cys	Asp
			325						330					335	
Tyr	His	Thr	Lys	Leu	Phe	Leu	Ile	Ala	Ile	Ser	Ser	Thr	Leu	Lys	Ser
		340						345					350		
Leu	Leu	Arg	Pro	His	Phe	Leu	Asn	Thr	Pro	Asp	Lys	Ser	Pro	Gly	Asp
		355					360					365			
Arg	Leu	Thr	Glu	Ile	Cys	Thr	Lys	Ile	Thr	Asp	Val	Asp	Ile	Asp	Lys
	370					375					380				
Val	Met	Ile	Asn	Leu	Lys	Thr	Glu	Glu	Phe	Val	Leu	Asp	Met	Asn	Thr
385					390					395					400
Leu	Gln	Ala	Leu	Gln	Gln	Leu	Leu	Gln	Trp	Val	Gly	Asp	Phe	Val	Leu
			405						410					415	
Tyr	Leu	Leu	Ala	Ser	Leu	Pro	Asn	Gln	Gly	Ser	Leu	Leu	Arg	Pro	Gly
			420					425					430		
His	Ser	Phe	Leu	Arg	Asp	Gly	Thr	Ser	Leu	Gly	Met	Leu	Arg	Glu	Leu
		435					440					445			
Met	Val	Val	Ile	Arg	Ile	Trp	Gly	Leu	Leu	Lys	Pro	Ser	Cys	Leu	Pro
	450					455					460				
Val	Tyr	Thr	Ala	Thr	Ser	Asp	Thr	Gln	Asp	Ser	Met	Ser	Leu	Leu	Phe
465					470					475					480
Arg	Leu	Leu	Thr	Lys	Leu	Trp	Ile	Cys	Cys	Arg	Asp	Glu	Gly	Pro	Ala
			485						490					495	
Ser	Glu	Pro	Asp	Glu	Ala	Leu	Val	Asp	Glu	Cys	Cys	Leu	Leu	Pro	Ser
			500					505					510		
Gln	Leu	Leu	Ile	Pro	Ser	Leu	Asp	Trp	Leu	Pro	Ala	Ser	Asp	Gly	Leu
		515					520					525			
Val	Ser	Arg	Leu	Gln	Pro	Lys	Gln	Pro	Leu	Arg	Leu	Gln	Phe	Gly	Arg
	530					535						540			
Ala	Pro	Thr	Leu	Pro	Gly	Ser	Ala	Ala	Thr	Leu	Gln	Leu	Asp	Gly	Leu
545					550					555					560
Ala	Arg	Ala	Pro	Gly	Gln	Pro	Lys	Ile	Asp	His	Leu	Arg	Arg	Leu	His
			565						570					575	
Leu	Gly	Ala	Cys	Pro	Thr	Glu	Glu	Cys	Lys	Ala	Cys	Thr	Arg	Cys	Gly
			580					585					590		
Cys	Val	Thr	Met	Leu	Lys	Ser	Pro	Asn	Arg	Thr	Thr	Ala	Val	Lys	Gln
		595					600					605			
Trp	Glu	Gln	Arg	Trp	Ile	Lys	Asn	Cys	Leu	Cys	Gly	Gly	Leu	Trp	Trp
	610					615					620				
Arg	Val	Pro	Leu	Ser	Tyr	Pro									
625					630										

<210> 3473

<211> 1660

<212> DNA

<213> Homo sapiens

<400> 3473

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120
gcgccatgcc cgggccggac tgagtgcgcg cgggcgagaa tggcgtagat ccagttggaa
180
ccattaaacg agggttttct ttctagaatc tctggtctgc tgctgtgcag atggacctgc
240
cggcactgct gtcagaagtg ctacgagtc agctgttgcc agtcaagtga ggatgaagtt
300
gaaattctgg gacctttccc tgctcagacc cctccctggc tgatggccag ccggagcagt
360
gacaaggatg gtgactctgt ccacacggcc agcgaagtcc cgctgacccc acggaccaat
420
tccccggatg gaagacgctc gtcctcagac acatccaagt ctacatacag cctgacgcgg
480
aggatttcga gtcttgagtc aagacgtccc agctctccac tcatcgatat taaacccatc
540
gagtttggcg ttctcagcgc caagaaggag cccatccaac cttcggtgct cagacggacc
600
tataaccccg acgactatct caggaagttc gaaccccacc tgtactccct cgactccaac
660
agcgacgatg tggactctct gacagacgag gagatcctgt ccaagtacca gctgggcatg
720
ctgcacttca gcactcagta cgacctgctg cacaaccacc tcaccgtgcg cgtgatcgag
780
gccagggacc tgccacctcc catctcccac gatggctcgc gccaggacat ggcgactcc
840
aacccttacg tcaagatctg tctcctgcca gaccagaaga actcaaagca gaccggggtc
900
aaacgcaaga cccagaagcc cgtgtttgag gagcgctaca ccttcgagat ccccttctg
960
gaggcccaga ggaggacct gctcctgacc gtggtggatt ttgataagtt ctcccggcac
1020
tgtgtcattg ggaaagtctt tgtgcctttg tgtgaagttg acctggtcaa ggcggggcac
1080
tggtggaagg cgctgattcc cagttctcag aatgaagtgg agctggggga gctgcttctg
1140
tactgaatt atctcccaag tgctggcaga ctgaatgttg atgtcattcg agccaagcaa
1200
cttcttcaga cagatgtgag ccaaggttca gaccttttg tgaaaatcca gctggtgcat
1260
ggactcaaac ttgtgaaaac caagaagacg tccttcttaa ggggcacaat tgatcctttc
1320
tacaatgaat ccttcagctt caaagtcccc caagaagaac tggaaaatgc cagcctagtg
1380
tttacagttt tcggccacaa catgaagagc agcaatgact tcatcgggag gatcgtcatt
1440
ggccagtact cttcaggccc ctctgagacc aaccactgga ggcgcatgct caacacgcac
1500

```

cgcacagccg tggagcagtg gcatagcctg aggtcccagag ctgagtggtga ccgcgtgtct
 1560
 cctgcctccc tggaggtgac ctgagggctg caggggaaggc agcttttcatt tgttttaaaaa
 1620
 aaaaaagacg gaaaaaaatg tgtcacatac tattacatcc
 1660

<210> 3474

<211> 474

<212> PRT

<213> Homo sapiens

<400> 3474

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Ile	Ser	Gly	Leu	Leu	Leu	Cys	Arg	Trp	Thr	Cys	Arg	His	Cys	Cys	Gln
			20					25					30		
Lys	Cys	Tyr	Glu	Ser	Ser	Cys	Cys	Gln	Ser	Ser	Glu	Asp	Glu	Val	Glu
		35					40					45			
Ile	Leu	Gly	Pro	Phe	Pro	Ala	Gln	Thr	Pro	Pro	Trp	Leu	Met	Ala	Ser
	50					55					60				
Arg	Ser	Ser	Asp	Lys	Asp	Gly	Asp	Ser	Val	His	Thr	Ala	Ser	Glu	Val
65				70					75					80	
Pro	Leu	Thr	Pro	Arg	Thr	Asn	Ser	Pro	Asp	Gly	Arg	Arg	Ser	Ser	Ser
				85					90					95	
Asp	Thr	Ser	Lys	Ser	Thr	Tyr	Ser	Leu	Thr	Arg	Arg	Ile	Ser	Ser	Leu
			100					105					110		
Glu	Ser	Arg	Arg	Pro	Ser	Ser	Pro	Leu	Ile	Asp	Ile	Lys	Pro	Ile	Glu
		115					120					125			
Phe	Gly	Val	Leu	Ser	Ala	Lys	Lys	Glu	Pro	Ile	Gln	Pro	Ser	Val	Leu
	130					135					140				
Arg	Arg	Thr	Tyr	Asn	Pro	Asp	Asp	Tyr	Phe	Arg	Lys	Phe	Glu	Pro	His
145				150					155					160	
Leu	Tyr	Ser	Leu	Asp	Ser	Asn	Ser	Asp	Asp	Val	Asp	Ser	Leu	Thr	Asp
			165					170						175	
Glu	Glu	Ile	Leu	Ser	Lys	Tyr	Gln	Leu	Gly	Met	Leu	His	Phe	Ser	Thr
		180					185					190			
Gln	Tyr	Asp	Leu	Leu	His	Asn	His	Leu	Thr	Val	Arg	Val	Ile	Glu	Ala
	195					200						205			
Arg	Asp	Leu	Pro	Pro	Pro	Ile	Ser	His	Asp	Gly	Ser	Arg	Gln	Asp	Met
	210					215					220				
Ala	His	Ser	Asn	Pro	Tyr	Val	Lys	Ile	Cys	Leu	Leu	Pro	Asp	Gln	Lys
225				230					235					240	
Asn	Ser	Lys	Gln	Thr	Gly	Val	Lys	Arg	Lys	Thr	Gln	Lys	Pro	Val	Phe
			245					250						255	
Glu	Glu	Arg	Tyr	Thr	Phe	Glu	Ile	Pro	Phe	Leu	Glu	Ala	Gln	Arg	Arg
		260					265					270			
Thr	Leu	Leu	Leu	Thr	Val	Val	Asp	Phe	Asp	Lys	Phe	Ser	Arg	His	Cys
	275					280						285			
Val	Ile	Gly	Lys	Val	Ser	Val	Pro	Leu	Cys	Glu	Val	Asp	Leu	Val	Lys
	290					295					300				
Gly	Gly	His	Trp	Trp	Lys	Ala	Leu	Ile	Pro	Ser	Ser	Gln	Asn	Glu	Val
305				310					315					320	
Glu	Leu	Gly	Glu	Leu	Leu	Leu	Ser	Leu	Asn	Tyr	Leu	Pro	Ser	Ala	Gly

```

          325          330          335
Arg Leu Asn Val Asp Val Ile Arg Ala Lys Gln Leu Leu Gln Thr Asp
          340          345          350
Val Ser Gln Gly Ser Asp Pro Phe Val Lys Ile Gln Leu Val His Gly
          355          360          365
Leu Lys Leu Val Lys Thr Lys Lys Thr Ser Phe Leu Arg Gly Thr Ile
          370          375          380
Asp Pro Phe Tyr Asn Glu Ser Phe Ser Phe Lys Val Pro Gln Glu Glu
385          390          395          400
Leu Glu Asn Ala Ser Leu Val Phe Thr Val Phe Gly His Asn Met Lys
          405          410          415
Ser Ser Asn Asp Phe Ile Gly Arg Ile Val Ile Gly Gln Tyr Ser Ser
          420          425          430
Gly Pro Ser Glu Thr Asn His Trp Arg Arg Met Leu Asn Thr His Arg
          435          440          445
Thr Ala Val Glu Gln Trp His Ser Leu Arg Ser Arg Ala Glu Cys Asp
          450          455          460
Arg Val Ser Pro Ala Ser Leu Glu Val Thr
465          470

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<210> 3475

<211> 514

<212> DNA

<213> Homo sapiens

<400> 3475

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120
gaggtgctcaacacgctgggtgcagctggcgccgacctggccatctttgcccctttggggg
180
ctcaagcccg tgggtctacctgctggccagctccttctctgggcctggggcctgcacccatc
240
tcggggccacttcgtggccga gactacatgttcctcaaggccacgagacctactcctac
300
tatggggcctctcaactggatcaccttcaatgtgggctaccacgtggagcaccacgacttc
360
cccagcatcccgggctacaa cctgccgctgtgctggaagtcgcgcccga gtactacgac
420
cacctgccgcagcaccactcctgggtgaaggtgctctgggattttgtgtttgaggactcc
480
ctggggccctatgccagggtgaagcgggtgtacata
514

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<210> 3476

<211> 171

<212> PRT

<213> Homo sapiens

<400> 3476

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Thr Arg Leu Glu Gly Trp Phe Phe Cys Thr Pro Ala Arg Lys Leu Leu
1          5          10          15
Trp Leu Val Leu Gln Pro Phe Phe Tyr Ser Leu Arg Pro Leu Cys Val

```

```

                20                25                30
His Pro Lys Ala Val Thr Arg Met Glu Val Leu Asn Thr Leu Val Gln
                35                40                45
Leu Ala Ala Asp Leu Ala Ile Phe Ala Leu Trp Gly Leu Lys Pro Val
                50                55                60
Val Tyr Leu Leu Ala Ser Ser Phe Leu Gly Leu Gly Leu His Pro Ile
65                70                75                80
Ser Gly His Phe Val Ala Glu His Tyr Met Phe Leu Lys Gly His Glu
                85                90                95
Thr Tyr Ser Tyr Tyr Gly Pro Leu Asn Trp Ile Thr Phe Asn Val Gly
                100                105                110
Tyr His Val Glu His His Asp Phe Pro Ser Ile Pro Gly Tyr Asn Leu
                115                120                125
Pro Leu Val Arg Lys Ile Ala Pro Glu Tyr Tyr Asp His Leu Pro Gln
                130                135                140
His His Ser Trp Val Lys Val Leu Trp Asp Phe Val Phe Glu Asp Ser
145                150                155                160
Leu Gly Pro Tyr Ala Arg Val Lys Arg Val Tyr
                165                170

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<210> 3477

<211> 356

<212> DNA

<213> Homo sapiens

<400> 3477

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gcgcgccctcg gctgcctgcc cggcggtctc cgggtctctcg tccagaccgg ccaccggagc
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ttgacctcct gcacgcaccc ttccatggga cttaatgaag agcagaaaga atttcaaaaa
120
gtggcctttg actttgctgc cgcagagatg gctccaaata tggcagagtg ggaccagaag
180
gtaggcggtt ttcttgctgc tagacgttct aacaacagat gtctcaggca gacctttatc
240
tttgtctccc gataatgtaa ttgttaaag tctcctccac ttaccaactc ttactgcaag
300
tgagaatacc ggtagtggat gatttttctc agaaggcac ctgatcatct tgtaca
356

```

<210> 3478

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3478

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Met Ile Arg Met Pro Ser Arg Lys Asn His Pro Leu Pro Val Phe Ser
1         5         10         15
Leu Ala Val Arg Val Gly Lys Trp Arg Arg His Leu Thr Ile Thr Leu
                20                25                30
Ser Gly Asp Lys Asp Lys Gly Leu Pro Glu Thr Ser Val Val Arg Thr
                35                40                45
Ser Lys His Lys Lys Asn Ala Tyr Leu Leu Val Pro Leu Cys His Ile
50                55                60
Trp Ser His Leu Ser Gly Ser Lys Val Lys Gly His Phe Leu Lys Phe

```

```

65              70              75              80
Phe Leu Leu Phe Ile Lys Ser His Gly Arg Val Asp Ala Gly Gly Gln
              85              90              95
Ala Pro Val Ala Gly Leu Asp Glu Asp Pro Glu Thr Ala Gly Gln Ala
              100              105              110
Ala Glu Ala Arg
              115

```

<210> 3479

<211> 797

<212> DNA

<213> Homo sapiens

<400> 3479

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taccctggct ctgacaggat catgctgcag aagtggcaga aaagggacat cagcaatttt
120
gagtatctca tgtacctcaa caccgaggct gggagaacct gcaatgacta catgcagtac
180
ccagtgttcc cctgggtcct cgcagactac acctcagaga cattgaactt ggcaaatccg
240
aagattttcc gggatctttc aaagcccatg ggggctcaga ccaaggaaag gaagctgaaa
300
tttatccaga ggtttaaaga agttgagaaa actgaaggag acatgactgc ccagtgccac
360
tactacaccc actactcctc ggccatcctc gtggcctcct acctgggtccg gatgccaccc
420
ttcaccagag ccttctgcgc tctgcagggt agctgctgcc actctctgta cacacacaca
480
cacacacaca cacacacata cgctgtatc acaagactaa gacctgtgct tgaacaaaga
540
caggatgcct ctgctaaaaa cttagtcatt agccagtgat tcccagttga cattggctcc
600
aggattctgg ctcaccagcc aaggcaggct gttcttcctc agttacacct gcacatctgc
660
ccaacaaagt cttgcaaaat gattctaaaa aataagaaat gagacatgaa aaaaatgatt
720
taacataaat aagatttagt ggaaaaagaa aaagcaggaa acttggagac tagaaaggca
780
ggcgggtcaag gattaga
797

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<210> 3480

<211> 192

<212> PRT

<213> Homo sapiens

<400> 3480

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Xaa Phe Gln Pro Ser Leu Lys Gly Lys Ala Thr Ser Glu Asp Thr Leu
1              5              10              15
Asn Leu Arg Arg Tyr Pro Gly Ser Asp Arg Ile Met Leu Gln Lys Trp
              20              25              30
Gln Lys Arg Asp Ile Ser Asn Phe Glu Tyr Leu Met Tyr Leu Asn Thr

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<210> 3481
<211> 1794
<212> DNA
<213> Homo sapiens
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<400> 3481
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aaaagcccag cacttcccag agccagggac tgacacaaca gaaagtctgc aagcaatgcc
120
atgaggtcct gaccagaggg tcttctgcca atgcctccaa gtggtcacca cctcagctct
180
gcagaccctg cgggtgctggg agccaccatg gagagtaggt gctacggctg cgctgtcaag
240
ttcacctctt tcaagaagga gtacggctgt aagaattgtg gcaggngctt ctgttcaggc
300
tgcctaagct tcagtgcagc agtgcctcgg actgggaaca cccaacagaa agtctgcaag
360
caatgccatg aggtcctgac cagaggggtct tctgccaatg cctccaagtg gtcaccacct
420
cagaactata agaagcgtgt ggcagccttg gaagccaagc aaaagcccag cacttcccag
480
agccagggac tgacacgaca agaccagatg attgctgagc gcctagcacg actccgccag
540
gagaacaagc ccaagttagt ccctcacag gcagagatag aggcacggct ggctgcccta
600
aaggatgaac gtcagggttc catcccttcc acccaggaaa tggaggcacg acttgcagcg
660
ttgcagggca gagttctacc ttctcaaacc cccagccccg gcacatcaca caccggacac
720
caggacccaa gcccagcaga cacaggatct gctaacgcag ctggcagctg aggtggctat
780
cgatgaaagc tggaaaggag gaggccagc tgccctctctc cagaatgatc tcaaccaggg
840

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tggcccaggg agcactaatt ccaagaggca ggccacttgg ttcttgagaga aggagaagag
 900
 cagactgctg gctgaggcag cacttgagtt gcgggaggag aacacgaggc aggaacggat
 960
 tctggccctg gccaaagcgac tagccatgct gcggggacag gaccccgaga gactgaccct
 1020
 ccaggactat cgctcccgag acagtgatga cgacgaggat gaggagacag ccatccaaag
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 1140
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 1200
 tgtggacccc aggccctgagg ctgaggaaga ggagctcccc tgggtgctgca tctgcaatga
 1260
 ggatgccacc ctacgctgcg ctggctgcca tggggacctc ttctgtgccc gctgcttcg
 1320
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 1380
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 1440
 ggcacccatt tctgggcccc gccacaggac gtccgatggg agagcttgct tggctctact
 1500
 gatgatg_ at aggcccttc ctgagccttg gtgtccctgg aatgaggaaa gattctccat
 1560
 tgcagagaat gactgggagg gaagaagtcg gggccctcct attagaagcc cagactggaa
 1620
 gtgagaggca tgatggggag agaccagact gaatctacgg gtgagccctg taacctggct
 1680
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 1740
 ggaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa
 1794

<210> 3482

<211> 206

<212> PRT

<213> Homo sapiens

<400> 3482

Met	Pro	Pro	Ser	Gly	His	His	Leu	Ser	Ser	Ala	Asp	Pro	Ala	Val	Leu
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Gly	Ala	Thr	Met	Glu	Ser	Arg	Cys	Tyr	Gly	Cys	Ala	Val	Lys	Phe	Thr
			20					25					30		
Leu	Phe	Lys	Lys	Glu	Tyr	Gly	Cys	Lys	Asn	Cys	Gly	Arg	Xaa	Phe	Cys
		35					40					45			
Ser	Gly	Cys	Leu	Ser	Phe	Ser	Ala	Ala	Val	Pro	Arg	Thr	Gly	Asn	Thr
		50				55				60					
Gln	Gln	Lys	Val	Cys	Lys	Gln	Cys	His	Glu	Val	Leu	Thr	Arg	Gly	Ser
65					70					75				80	
Ser	Ala	Asn	Ala	Ser	Lys	Trp	Ser	Pro	Pro	Gln	Asn	Tyr	Lys	Lys	Arg
			85					90						95	
Val	Ala	Ala	Leu	Glu	Ala	Lys	Gln	Lys	Pro	Ser	Thr	Ser	Gln	Ser	Gln
			100					105					110		
Gly	Leu	Thr	Arg	Gln	Asp	Gln	Met	Ile	Ala	Glu	Arg	Leu	Ala	Arg	Leu

```

      115      120      125
Arg  Gln  Glu  Asn  Lys  Pro  Lys  Leu  Val  Pro  Ser  Gln  Ala  Glu  Ile  Glu
      130      135      140
Ala  Arg  Leu  Ala  Ala  Leu  Lys  Asp  Glu  Arg  Gln  Gly  Ser  Ile  Pro  Ser
145      150      155      160
Thr  Gln  Glu  Met  Glu  Ala  Arg  Leu  Ala  Ala  Leu  Gln  Gly  Arg  Val  Leu
      165      170      175
Pro  Ser  Gln  Thr  Pro  Gln  Pro  Gly  Thr  Ser  His  Thr  Gly  His  Gln  Asp
      180      185      190
Pro  Ser  Pro  Ala  Asp  Thr  Gly  Ser  Ala  Asn  Ala  Ala  Gly  Ser
      195      200      205

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<210> 3483

<211> 477

<212> DNA

<213> Homo sapiens

<400> 3483

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ncggccgcgg cgcggaacgg cgctcccgcc cccaccatgg gcaacagcgc gagccgcaac
60
gacttcgagt gggctctacac cgaccagccg cacacgcagc ggcgcaagga gatactggcc
120
aagtacccgg ccatcaaggc cctgatgcgg ccagaccgcg gcctcaagtg ggcggggctg
180
gtgctgggtgc tgggtgcagat gctggcctgc tggctgggtgc gcgggctggc ctggcgctgg
240
ctgctgttct gggcctacgc ctttggtggc tgcgtgaacc actcgctgac gctggccatc
300
cacgacatct cgcacaacgc ggccttcggc acgggccgtg cggcacgcaa ccgctggctg
360
gccgtgttcg ccaacctgcc cgtgggtgtg ccctacgcgg cctccttcaa gaagtaccac
420
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477

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<210> 3484

<211> 147

<212> PRT

<213> Homo sapiens

<400> 3484

```

Met  Gly  Asn  Ser  Ala  Ser  Arg  Asn  Asp  Phe  Glu  Trp  Val  Tyr  Thr  Asp
 1      5      10      15
Gln  Pro  His  Thr  Gln  Arg  Arg  Lys  Glu  Ile  Leu  Ala  Lys  Tyr  Pro  Ala
      20      25      30
Ile  Lys  Ala  Leu  Met  Arg  Pro  Asp  Pro  Arg  Leu  Lys  Trp  Ala  Gly  Leu
      35      40      45
Val  Leu  Val  Leu  Val  Gln  Met  Leu  Ala  Cys  Trp  Leu  Val  Arg  Gly  Leu
      50      55      60
Ala  Trp  Arg  Trp  Leu  Leu  Phe  Trp  Ala  Tyr  Ala  Phe  Gly  Gly  Cys  Val
65      70      75      80
Asn  His  Ser  Leu  Thr  Leu  Ala  Ile  His  Asp  Ile  Ser  His  Asn  Ala  Ala
      85      90      95
Phe  Gly  Thr  Gly  Arg  Ala  Ala  Arg  Asn  Arg  Trp  Leu  Ala  Val  Phe  Ala

```

```

          100          105          110
Asn Leu Pro Val Gly Val Pro Tyr Ala Ala Ser Phe Lys Lys Tyr His
          115          120          125
Val Asp His His Arg Tyr Leu Gly Gly Asp Gly Leu Asp Val Asp Val
          130          135          140
Pro Thr Arg
145

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<210> 3485
 <211> 812
 <212> DNA
 <213> Homo sapiens

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<400> 3485
tattttattta tagtcacaaa aactgttcag gaagaaatgt tatgaaaaga acattttttac
60
tgcattgctta aaacatttaa ttttctatta tacagttaaa catttgcttg aattcagtga
120
gtctaaaaaaa tcttattgtt ctcagggttag cagtttagttg agcagagtcc attggtgaag
180
caatctagtt attggcaaatt tctaacacat ggtaagggtgt ggggggaaagg atttaaaata
240
acagaaaaaat gtaagtacaa acatacataa cagcaaaaata aaactcactt taacaaaaat
300
ttattttaaaa tggtaccccc atatttcctc aatgaccaac ttgttttcagt tttatctccc
360
cctcatccgg ttattttatg tctttttggg aggaaggagg atgagggttt ttgtttttta
420
acaaaatcac tggcttttta aaaagtgtta ctgcagtcatt ttataagatg catgttatgt
480
ggaagtgata cctgagttgt ttgcatgggc aatggaagag gcagcagctc tgaaaggagt
540
atgagtccag aaaaaaatcc ttcaggaacc ttcaagattg aagaaagaac ttcttttaac
600
attaaagacc aagtattatt ggccagagtc tcttctgaga ttgtgagttt ttcattaact
660
ccttgtgttaa aagtcagtaa aatatcaatg atatcattct gaattttctg ttcatcacta
720
tccaaacgac ctgagagggg gatagagcac aggagcatat gtaaagtaac aagcgctgaa
780
ggaacacgca tgtccttaaa ctcaaaggat cc
812

```

<210> 3486
 <211> 117
 <212> PRT
 <213> Homo sapiens

```

<400> 3486
Met Arg Val Pro Ser Ala Leu Val Thr Leu His Met Leu Leu Cys Ser
1          5          10          15
Ile Pro Leu Ser Gly Arg Leu Asp Ser Asp Glu Gln Lys Ile Gln Asn
          20          25          30
Asp Ile Ile Asp Ile Leu Leu Thr Phe Thr Gln Gly Val Asn Glu Lys

```

```
<210> 3487
<211> 772
<212> DNA
<213> Homo sapiens
```

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<400> 3487
nnattgtatc aaaatcctag atttgaataa cttattattt taaataatca gtaactaaaa
60
ccaagcaatc catcacacaa agagggggaaa gggtaatat ctgagttata aattttttac
120
cctgtctgat aaaaatagaa gcctgaaagt ttaaattttt cctggattta aatttaaaga
180
taaatttggt tttcagtgaa atatcctcaa tagcaatttt accaaagagg ctttcttctg
240
aaggccacct ctgaaataat tagaggataa atgtcaatgg catgatatta agatattact
300
tggccaggcg tggtcgtcac gcgtgtaatc ccagcacttt gggaggccga ggcagggtgga
360
tcacgaggtc aagaaatcga gaccagcctg gctaacacag tgaaaccccg tctcattctg
420
agcttcttga caccttttaa tccagtcact gaaattagca tctgcaccta gaaagaaaaa
480
actgactata acatcactca tctgcacaac ctattaatca gcaaatactt actgaatacc
540
tactacatcc caggcagtgt tctaggcact ggggagtcgg cagcgaacaa aacctgtctt
600
aacagacctt atcaccaact ctactatagt tataaacata ccaatagttt aacatttagt
660
tgттаatcat gaaacatttt gatttttttaa aaattttaac tacagtcaac cttaatttca
720
cagatacaaa taatctgcat ttcccccaat cccgctgctc ttagagaagc tt
772

```

```
<210> 3488
<211> 59
<212> PRT
<213> Homo sapiens
```

```
<400> 3488
Asp Ile Thr Trp Pro Gly Val Val Val Thr Arg Val Ile Pro Ala Leu
 1             5             10            15
Trp Glu Ala Glu Ala Gly Gly Ser Arg Gly Gln Glu Ile Glu Thr Ser
```

```

                20                25                30
Leu Ala Asn Thr Val Lys Pro Arg Leu Ile Leu Ser Phe Leu Thr Pro
                35                40                45
Phe Asn Pro Val Thr Glu Ile Ser Ile Cys Thr
                50                55

```

<210> 3489
 <211> 288
 <212> DNA
 <213> Homo sapiens

```

<400> 3489
tagctaacac tccactatgg gagcccatct cctcccaggg ccagggagac cagggagacc
60
agggagacca ggtctggccc ccaactctaa ggctcatctt agaggcgaga ttcaggccca
120
gcccaggggtg ccccatgagg cctggtgggtt ggaggcagag ggtatccctt gccc aaattc
180
gtgccacatt cacagtcact gggaaagcta cggggatggg ccgggcgcgg tggctcacac
240
ctgtaatccc agcacttttg agagccccaa gacgacggat cacgagtc
288

```

<210> 3490
 <211> 90
 <212> PRT
 <213> Homo sapiens

```

<400> 3490
Met Gly Ala His Leu Leu Pro Gly Pro Gly Arg Pro Gly Arg Pro Gly
1      5      10      15
Arg Pro Gly Leu Ala Pro Asn Ser Lys Ala His Leu Arg Gly Glu Ile
20     25     30
Gln Ala Gln Pro Arg Val Pro His Glu Ala Trp Trp Leu Glu Ala Glu
35     40     45
Gly Ile Pro Cys Pro Asn Ser Cys His Ile His Ser His Trp Glu Ser
50     55     60
Tyr Gly Asp Gly Pro Gly Ala Val Ala His Thr Cys Asn Pro Ser Thr
65     70     75     80
Leu Glu Ser Pro Lys Thr Thr Asp His Glu
85     90

```

<210> 3491
 <211> 568
 <212> DNA
 <213> Homo sapiens

```

<400> 3491
gggaaccgac gtccctctgt ggtgaaattc cacccttca cgccgtgcat cgccgtagcc
60
gacaaggaca gcatctgctt ttgggactgg gagaaagggg agaagctgga ttatttccac
120
aatgggaacc ctcggtacac gagggtcact gccatggagt atctgaatgg ccaggactgc
180

```

tcgcttctgc tgacggccac agacgatggt gccatcaggg tctggaagaa ttttgctgat
 240
 ttggaaaaga acccagagat ggtgaccgcg tggcaggggc tctcggacat gctgccaacg
 300
 acgcgaggag ctgggatggt ggtggactgg gagcaggaga ccggcctcct catgagctca
 360
 ggagacgtgc ggatcgtecg gatctgggac acagaccgtg agatgaaggt gcaggacatc
 420
 cctacgggcy cagacagctg tgtgacgagt ctgtcctgtg attcccaccg ctcaatcatc
 480
 gtggctggcc tcggtgacgg ctccatccgc gtctacgaca gaaggatggc actcagcgaa
 540
 tgccgctca tgacgtaccg ggagcaca
 568

<210> 3492
 <211> 189
 <212> PRT
 <213> Homo sapiens

<400> 3492
 Gly Asn Arg Arg Pro Ser Val Val Lys Phe His Pro Phe Thr Pro Cys
 1 5 10 15
 Ile Ala Val Ala Asp Lys Asp Ser Ile Cys Phe Trp Asp Trp Glu Lys
 20 25 30
 Gly Glu Lys Leu Asp Tyr Phe His Asn Gly Asn Pro Arg Tyr Thr Arg
 35 40 45
 Val Thr Ala Met Glu Tyr Leu Asn Gly Gln Asp Cys Ser Leu Leu Leu
 50 55 60
 Thr Ala Thr Asp Asp Gly Ala Ile Arg Val Trp Lys Asn Phe Ala Asp
 65 70 75 80
 Leu Glu Lys Asn Pro Glu Met Val Thr Ala Trp Gln Gly Leu Ser Asp
 85 90 95
 Met Leu Pro Thr Thr Arg Gly Ala Gly Met Val Val Asp Trp Glu Gln
 100 105 110
 Glu Thr Gly Leu Leu Met Ser Ser Gly Asp Val Arg Ile Val Arg Ile
 115 120 125
 Trp Asp Thr Asp Arg Glu Met Lys Val Gln Asp Ile Pro Thr Gly Ala
 130 135 140
 Asp Ser Cys Val Thr Ser Leu Ser Cys Asp Ser His Arg Ser Leu Ile
 145 150 155 160
 Val Ala Gly Leu Gly Asp Gly Ser Ile Arg Val Tyr Asp Arg Arg Met
 165 170 175
 Ala Leu Ser Glu Cys Arg Val Met Thr Tyr Arg Glu His
 180 185

<210> 3493
 <211> 2244
 <212> DNA
 <213> Homo sapiens

<400> 3493
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 60

aaggaactgt ttggagatga cagtgaggac gagggagctt cacatcatag tggtagtgat
120
aatcactctg aaagatcaga caatagatca gaagcttctg agcgttctga ccatgaggac
180
aatgaccctt cagatgtaga tcagcacagt ggatcagaag cccctaata tgaatgaagac
240
gaaggtcata gatcggatgg agggagccat cattcagaag cagaagggtc tgaaaaagca
300
cattcagatg atgaaaaatg gggcagagaa gataaaagt accagtcaga tgatgaaaag
360
atacaaaatt ctgatgatga ggagagggca caaggatctg atgaagataa gctgcagaat
420
tctgacgatg atgagaaaat gcagaacaca gatgatgagg agaggcctca gctttccgat
480
gatgagagac aacagctatc tgaggaggaa aaggctaatt ctgatgatga acggccggta
540
gcttctgata atgatgatga gaaacagaat tctgatgatg aagaacaacc acagctgtct
600
gatgaagaga aaatgcaaaa ttctgatgat gaaaggccac aggccccaga tgaagaacac
660
aggcattcag atgatgaaga ggaacaggat cataaatcag aatccgcaag aggcagtgat
720
agtgaagatg aagttttacg aatgaaacgc aagaatgcga ttgcatctga ttcagaagcg
780
gatagtgaca ctgaggtgcc aaaagataat agtggaacca tggatttatt tggaggtgca
840
gatgatattc cttcagggag tgatggagaa gacaaaccac ctactccagg acagcctggt
900
gatgaaaatg gattgcctca ggatcaacag gaagaggagc caattcctga gaccagaata
960
gaagtagaaa tacccaaagt aaacactgat ttaggaaacg acttatattt tgttaaactg
1020
cccaactttc tcagtgtaga gccagacct tttgatctc agtattatga agatgaattt
1080
gaagatgaag aaatgctgga tgaagaagg agaaccagg taaaattaaa ggtagaaaat
1140
actataagat ggaggatacg ccgagatgaa gaaggaaatg aaattaaaga aagcaatgct
1200
cggatagtca agtggtcaga tggaaagcatg tccctgcatt taggcaatga agtgtttgat
1260
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1320
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1380
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1440
agaatcttgc caatggctgg tcgtgatect gaatgccaac gcacagaaat gattaagaaa
1500
gaagaagaac gtttgagggc ttccatacgt agggaaatctc agcagcgccg aatgagagag
1560
aaacagcacc agcgggggct gagcgccagt tacctggaac ctgatcgata cgatgaggag
1620
gaggaaggcg aggagtcct cagcttggct gccattaaaa accgatataa agggggcatt
1680

cgagaggaac gagccagaat ctattcatca gacagtgatg agggatcaga agaagataaa
 1740
 gctcaaagat tactcaaagc aaagaaactt accagtgatg aggaaggatga accttccgga
 1800
 aagagaaaag cagaagatga tgataaagca aataaaaagc ataagaagta tgtgatcagc
 1860
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 1920
 ttgtacagtt ataaatatgt aaacatgagt tatttttgatt gaaatgaatc gatttgcttt
 1980
 tgtgtaattt taattgtaat aaaacaattt aaaagcaagt ctctatgttt aagaaatcta
 2040
 cttttccggc caggcgcggt ggctcatgcc tgtaatccca gcacttcggg aggccgaggc
 2100
 aggtggatca caaggtcgtg gtggcgggtg cctgtagtcg cagctactcg ggaggctgag
 2160
 gcgggggaat tggttgaacc caggaggcag aggttgacgt tagccgagat cgcgccactg
 2220
 cactccagcc tggcgacaga gcta
 2244

<210> 3494

<211> 628

<212> PRT

<213> Homo sapiens

<400> 3494

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Gln	Pro	Ser	Asn	Lys	Glu	Leu	Phe	Gly	Asp	Asp	Ser	Glu	Asp	Glu	Gly
			20					25					30		
Ala	Ser	His	His	Ser	Gly	Ser	Asp	Asn	His	Ser	Glu	Arg	Ser	Asp	Asn
		35					40					45			
Arg	Ser	Glu	Ala	Ser	Glu	Arg	Ser	Asp	His	Glu	Asp	Asn	Asp	Pro	Ser
		50				55					60				
Asp	Val	Asp	Gln	His	Ser	Gly	Ser	Glu	Ala	Pro	Asn	Asp	Asp	Glu	Asp
65					70				75					80	
Glu	Gly	His	Arg	Ser	Asp	Gly	Gly	Ser	His	Ser	Glu	Ala	Glu	Gly	
			85					90					95		
Ser	Glu	Lys	Ala	His	Ser	Asp	Asp	Glu	Lys	Trp	Gly	Arg	Glu	Asp	Lys
		100						105					110		
Ser	Asp	Gln	Ser	Asp	Asp	Glu	Lys	Ile	Gln	Asn	Ser	Asp	Asp	Glu	Glu
		115				120						125			
Arg	Ala	Gln	Gly	Ser	Asp	Glu	Asp	Lys	Leu	Gln	Asn	Ser	Asp	Asp	Asp
		130				135					140				
Glu	Lys	Met	Gln	Asn	Thr	Asp	Asp	Glu	Glu	Arg	Pro	Gln	Leu	Ser	Asp
145				150					155					160	
Asp	Glu	Arg	Gln	Gln	Leu	Ser	Glu	Glu	Glu	Lys	Ala	Asn	Ser	Asp	Asp
			165					170					175		
Glu	Arg	Pro	Val	Ala	Ser	Asp	Asn	Asp	Asp	Glu	Lys	Gln	Asn	Ser	Asp
		180					185						190		
Asp	Glu	Glu	Gln	Pro	Gln	Leu	Ser	Asp	Glu	Glu	Lys	Met	Gln	Asn	Ser
	195					200						205			
Asp	Asp	Glu	Arg	Pro	Gln	Ala	Pro	Asp	Glu	Glu	His	Arg	His	Ser	Asp

210		215		220
Asp Glu Glu Glu Gln	Asp His Lys Ser Glu	Ser Ala Arg Gly Ser Asp		
225	230	235	240	
Ser Glu Asp Glu Val	Leu Arg Met Lys Arg	Lys Asn Ala Ile Ala Ser		
	245	250	255	
Asp Ser Glu Ala Asp	Ser Asp Thr Glu Val	Pro Lys Asp Asn Ser Gly		
	260	265	270	
Thr Met Asp Leu Phe	Gly Gly Ala Asp Asp	Ile Ser Ser Gly Ser Asp		
	275	280	285	
Gly Glu Asp Lys Pro	Pro Thr Pro Gly Gln	Pro Val Asp Glu Asn Gly		
	290	295	300	
Leu Pro Gln Asp Gln	Gln Glu Glu Glu Pro	Ile Pro Glu Thr Arg Ile		
305	310	315	320	
Glu Val Glu Ile Pro	Lys Val Asn Thr Asp	Leu Gly Asn Asp Leu Tyr		
	325	330	335	
Phe Val Lys Leu Pro	Asn Phe Leu Ser Val	Glu Pro Arg Pro Phe Asp		
	340	345	350	
Pro Gln Tyr Tyr Glu	Asp Glu Phe Glu Asp	Glu Glu Met Leu Asp Glu		
	355	360	365	
Glu Gly Arg Thr Arg	Leu Lys Leu Lys Val	Glu Asn Thr Ile Arg Trp		
	370	375	380	
Arg Ile Arg Arg Asp	Glu Glu Gly Asn Glu	Ile Lys Glu Ser Asn Ala		
385	390	395	400	
Arg Ile Val Lys Trp	Ser Asp Gly Ser Met	Ser Leu His Leu Gly Asn		
	405	410	415	
Glu Val Phe Asp Val	Tyr Lys Ala Pro Leu	Gln Gly Asp His Asn His		
	420	425	430	
Leu Phe Ile Arg Gln	Gly Thr Gly Leu Gln	Gly Gln Ala Val Phe Lys		
	435	440	445	
Ala Lys Leu Thr Phe	Arg Pro His Ser Thr	Asp Ser Ala Thr His Arg		
	450	455	460	
Lys Met Thr Leu Ser	Leu Ala Asp Arg Cys	Ser Lys Thr Gln Lys Ile		
465	470	475	480	
Arg Ile Leu Pro Met	Ala Gly Arg Asp Pro	Glu Cys Gln Arg Thr Glu		
	485	490	495	
Met Ile Lys Lys Glu	Glu Glu Arg Leu Arg	Ala Ser Ile Arg Arg Glu		
	500	505	510	
Ser Gln Gln Arg Arg	Met Arg Glu Lys Gln	His Gln Arg Gly Leu Ser		
	515	520	525	
Ala Ser Tyr Leu Glu	Pro Asp Arg Tyr Asp	Glu Glu Glu Gly Glu		
	530	535	540	
Glu Ser Ile Ser Leu	Ala Ala Ile Lys Asn	Arg Tyr Lys Gly Gly Ile		
545	550	555	560	
Arg Glu Glu Arg Ala	Arg Ile Tyr Ser Ser	Asp Ser Asp Glu Gly Ser		
	565	570	575	
Glu Glu Asp Lys Ala	Gln Arg Leu Leu Lys	Ala Lys Lys Leu Thr Ser		
	580	585	590	
Asp Glu Glu Gly Glu	Pro Ser Gly Lys Arg	Lys Ala Glu Asp Asp Asp		
	595	600	605	
Lys Ala Asn Lys Lys	His Lys Lys Tyr Val	Ile Ser Asp Glu Glu Glu		
	610	615	620	
Glu Asp Asp Asp				
625				

<210> 3495
 <211> 1085
 <212> DNA
 <213> Homo sapiens

<400> 3495
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 60
 cgcagacaca agatggtgaa ggagaccag tactatgaca tcctgggcgt gaagcccagc
 120
 gcgtccccgg aggagatcaa gaaggcctat cggaagctgg cgctcaagta ccacccggac
 180
 aagaacccgg atgagggcgga gaagtttaaa ctcatatccc aggcataatga agtgctttca
 240
 gatccaaaga aaagggatgt ttatgaccaa ggcggagagc aggcaattaa agaaggaggc
 300
 tcaggcagcc ccagcttctc ttcacccatg gacatctttg acatgttctt tgggtggtggt
 360
 ggacggatgg ctagagagag aagaggcaag aatgttgtag accagttatc tgtaactctt
 420
 gaagatctat ataatggagt cacgaagaaa ttggccctcc agaaaaatgt aatttgtgag
 480
 aaatgtgaag gtgttggtgg gaagaagggg tgggtggaga agtgcccgtg gtgcaagggg
 540
 cgggggatgc agatccacat ccagcagatc gggccgggca tggtagagca gatccagacc
 600
 gtgtgcatcg agtgcaaggg ccagggtgag cgcatcaacc ccaaggaccg ctgagagagc
 660
 tgcagcgggg ccaaggtgat ccgtgagaag aagattatcg aggtacatgt tgaaaaaggt
 720
 atgaaagatg ggcaaaagat actatttcat ggagaaggag atcaggagcc tgagctggag
 780
 cctggtgatg tcataattgt gcttgatcag aaggatcata gtgtctttca gagacgaggg
 840
 catgacttga tcatgaaaat gaaaattcag ctttctgaag ctctttgtgg cttcaagaag
 900
 acgataaaaa cattggacaa tcgaattctt gttattacat ccaaagcagg tgaggtgata
 960
 aagcacgggg acctgagatg cgtgcgcgat gaaggaatgc ccatctacaa agcaccctg
 1020
 gaaaaagggg ttctgatcat acagttttta gtaatctttc ctganaaaca ctggctttct
 1080
 ctgga
 1085

<210> 3496
 <211> 337
 <212> PRT
 <213> Homo sapiens

<400> 3496
 Met Val Lys Glu Thr Gln Tyr Tyr Asp Ile Leu Gly Val Lys Pro Ser
 1 5 10 15
 Ala Ser Pro Glu Glu Ile Lys Lys Ala Tyr Arg Lys Leu Ala Leu Lys

			20					25					30				
Tyr	His	Pro	Asp	Lys	Asn	Pro	Asp	Glu	Gly	Glu	Lys	Phe	Lys	Leu	Ile		
		35					40					45					
Ser	Gln	Ala	Tyr	Glu	Val	Leu	Ser	Asp	Pro	Lys	Lys	Arg	Asp	Val	Tyr		
	50					55					60						
Asp	Gln	Gly	Gly	Glu	Gln	Ala	Ile	Lys	Glu	Gly	Gly	Ser	Gly	Ser	Pro		
65					70				75						80		
Ser	Phe	Ser	Ser	Pro	Met	Asp	Ile	Phe	Asp	Met	Phe	Phe	Gly	Gly	Gly		
				85					90					95			
Gly	Arg	Met	Ala	Arg	Glu	Arg	Arg	Gly	Lys	Asn	Val	Val	His	Gln	Leu		
		100						105					110				
Ser	Val	Thr	Leu	Glu	Asp	Leu	Tyr	Asn	Gly	Val	Thr	Lys	Lys	Leu	Ala		
		115					120					125					
Leu	Gln	Lys	Asn	Val	Ile	Cys	Glu	Lys	Cys	Glu	Gly	Val	Gly	Gly	Lys		
	130					135				140							
Lys	Gly	Ser	Val	Glu	Lys	Cys	Pro	Leu	Cys	Lys	Gly	Arg	Gly	Met	Gln		
145					150				155					160			
Ile	His	Ile	Gln	Gln	Ile	Gly	Pro	Gly	Met	Val	Gln	Gln	Ile	Gln	Thr		
			165					170						175			
Val	Cys	Ile	Glu	Cys	Lys	Gly	Gln	Gly	Glu	Arg	Ile	Asn	Pro	Lys	Asp		
		180					185					190					
Arg	Cys	Glu	Ser	Cys	Ser	Gly	Ala	Lys	Val	Ile	Arg	Glu	Lys	Lys	Ile		
	195					200					205						
Ile	Glu	Val	His	Val	Glu	Lys	Gly	Met	Lys	Asp	Gly	Gln	Lys	Ile	Leu		
	210					215					220						
Phe	His	Gly	Glu	Gly	Asp	Gln	Glu	Pro	Glu	Leu	Glu	Pro	Gly	Asp	Val		
225					230				235					240			
Ile	Ile	Val	Leu	Asp	Gln	Lys	Asp	His	Ser	Val	Phe	Gln	Arg	Arg	Gly		
			245					250					255				
His	Asp	Leu	Ile	Met	Lys	Met	Lys	Ile	Gln	Leu	Ser	Glu	Ala	Leu	Cys		
		260					265					270					
Gly	Phe	Lys	Lys	Thr	Ile	Lys	Thr	Leu	Asp	Asn	Arg	Ile	Leu	Val	Ile		
	275					280					285						
Thr	Ser	Lys	Ala	Gly	Glu	Val	Ile	Lys	His	Gly	Asp	Leu	Arg	Cys	Val		
	290					295				300							
Arg	Asp	Glu	Gly	Met	Pro	Ile	Tyr	Lys	Ala	Pro	Leu	Glu	Lys	Gly	Ile		
305					310				315					320			
Leu	Ile	Ile	Gln	Phe	Leu	Val	Ile	Phe	Pro	Xaa	Lys	His	Trp	Leu	Ser		
			325					330					335				

Leu

<210> 3497

<211> 1638

<212> DNA

<213> Homo sapiens

<400> 3497

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<210> 3498

<211> 210

<212> PRT

<213> Homo sapiens

<400> 3498

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 35 40 45
 Gly Glu Asn Ala Gly Arg Pro Thr His Thr Thr Lys Met Glu Ser Ile
 50 55 60
 Gln Val Leu Glu Glu Cys Gln Asn Pro Thr Ala Glu Glu Val Leu Ser
 65 70 75 80
 Trp Ser Gln Asn Phe Asp Lys Met Met Lys Ala Pro Ala Gly Arg Asn
 85 90 95
 Leu Phe Arg Glu Phe Leu Arg Thr Glu Tyr Ser Glu Glu Asn Leu Leu
 100 105 110
 Phe Trp Leu Ala Cys Glu Asp Leu Lys Lys Glu Gln Asn Lys Lys Val
 115 120 125
 Ile Glu Glu Lys Ala Arg Met Ile Tyr Glu Asp Tyr Ile Ser Ile Leu
 130 135 140
 Ser Pro Lys Glu Val Ser Leu Asp Ser Arg Val Arg Glu Val Ile Asn
 145 150 155 160
 Arg Asn Leu Leu Asp Pro Asn Pro His Met Tyr Glu Asp Ala Gln Leu
 165 170 175
 Gln Ile Tyr Thr Leu Met His Arg Asp Ser Phe Pro Arg Phe Leu Asn
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 Ser Gln Ile Tyr Lys Ser Phe Val Glu Ser Thr Ala Gly Ser Ser Ser
 195 200 205
 Glu Ser
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<210> 3499

<211> 732

<212> DNA

<213> Homo sapiens

<400> 3499

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 180
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 240
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 420
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<210> 3500

<211> 168

<212> PRT

<213> Homo sapiens

<400> 3500

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			20					25					30		
Ala	Ser	Thr	Gly	Lys	Gln	Gly	Ala	Pro	Gly	Pro	Asp	Trp	Ala	Cys	Ile
			35				40					45			
Phe	His	Val	Val	Leu	Gln	Pro	Ser	Arg	His	Gly	Pro	Glu	Ala	Thr	Ala
	50					55					60				
Ala	Pro	Gln	Ser	Pro	Pro	Thr	Pro	Ala	Val	Pro	Pro	Gly	His	Gly	Ala
65					70					75					80
His	Asp	Ser	Gly	Pro	Gly	Gln	Arg	Gln	Arg	Gln	Gly	Ala	Gly	Ser	Thr
				85				90						95	
Pro	Ala	Arg	Val	Pro	Val	His	Gly	Ser	Pro	Ser	Ser	Cys	Arg	Ala	Leu
			100					105					110		
Arg	Pro	Ala	Gly	Arg	Ser	Ser	Arg	Ala	Ala	Pro	Arg	Ala	Ser	Pro	Ala
			115				120					125			
Gly	Gln	Ala	Ser	Ser	Arg	Pro	Xaa	Ser	Gly	Ala	Met	His	Arg	Leu	Gly
			130			135				140					
Glu	Gly	Asn	Arg	Ala	Gly	Glu	Lys	Val	Phe	Arg	Arg	Thr	Ala	Val	Gln
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<210> 3501

<211> 691

<212> DNA

<213> Homo sapiens

<400> 3501

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 180
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 300

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<210> 3502
 <211> 196
 <212> PRT
 <213> Homo sapiens

<400> 3502
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 Glu Ile Lys Leu Tyr Ala Gln Ile Pro Pro Ile Glu Lys Met Asp Ala
 35 40 45
 Ser Leu Ser Met Leu Ala Asn Cys Glu Lys Leu Ser Leu Ser Thr Asn
 50 55 60
 Cys Ile Glu Lys Ile Ala Asn Leu Asn Gly Leu Lys Asn Leu Arg Ile
 65 70 75 80
 Leu Ser Leu Gly Arg Asn Asn Ile Lys Asn Leu Asn Gly Leu Glu Ala
 85 90 95
 Val Gly Asp Thr Leu Glu Glu Leu Trp Ile Ser Tyr Asn Phe Ile Glu
 100 105 110
 Lys Leu Lys Gly Ile His Ile Met Lys Lys Leu Lys Ile Leu Tyr Met
 115 120 125
 Ser Asn Asn Leu Val Lys Asp Trp Ala Glu Phe Val Lys Leu Ala Glu
 130 135 140
 Leu Pro Cys Leu Glu Asp Leu Val Phe Val Gly Asn Pro Leu Glu Glu
 145 150 155 160
 Lys His Ser Ala Glu Asn Asn Trp Ile Glu Glu Ala Thr Lys Arg Val
 165 170 175
 Pro Lys Leu Lys Lys Leu Asp Gly Thr Pro Val Ile Lys Gly Asp Glu
 180 185 190
 Glu Glu Asp Asn
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<210> 3503
 <211> 857
 <212> DNA
 <213> Homo sapiens

<400> 3503

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 180
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<210> 3504

<211> 285

<212> PRT

<213> Homo sapiens

<400> 3504

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Gln	Gly	Cys	Gly	Ser	Leu	Phe	Thr	Leu	Val	Ser	Lys	Pro	Phe	Cys	Ala
			20					25					30		
Ala	Ala	Ala	Ala	Ser	Thr	Ala	Ile	Asn	Ala	Gln	Arg	Leu	Ala	Glu	Lys
			35				40					45			
Leu	Arg	Ala	Gln	Lys	Arg	Glu	Gln	Asp	Thr	Lys	Lys	Glu	Pro	Val	Ser
	50				55						60				
Thr	Asn	Ala	Val	Gln	Arg	Arg	Val	Gln	Glu	Ile	Val	Arg	Phe	Thr	Arg
65				70					75					80	
Gln	Leu	Gln	Arg	Val	His	Pro	Asn	Val	Leu	Ala	Lys	Ala	Leu	Thr	Arg
			85					90					95		
Gly	Ile	Leu	His	Gln	Asp	Lys	Asn	Leu	Val	Val	Ile	Asn	Lys	Pro	Tyr
			100					105					110		
Gly	Leu	Pro	Val	His	Gly	Gly	Pro	Gly	Val	Gln	Leu	Cys	Ile	Thr	Asp
	115						120					125			
Val	Leu	Pro	Ile	Leu	Ala	Lys	Met	Leu	His	Gly	His	Lys	Ala	Glu	Pro

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Leu His Leu Cys His Arg	Leu Asp Lys Glu Thr	Thr Gly Val Met Val		
145		150	155	160
Leu Ala Trp Asp Lys Asp Met Ala His Gln Val	Gln Glu Leu Phe Arg			
	165	170	175	
Thr Arg Gln Val Val Lys Lys Tyr Trp Ala Ile Thr Val His Val Pro				
	180	185	190	
Met Pro Ser Ala Gly Val Val Asp Ile Pro Ile Val Glu Lys Glu Gly				
	195	200	205	
Gln Gly Gln Gln Gln His Pro Arg Met Thr Leu Ser Pro Ser Ser Arg				
	210	215	220	
Met Asp Asp Gly Lys Met Val Lys Val Arg Arg Ser Arg Asn Ala Gln				
225		230	235	240
Val Ala Val Thr Gln Tyr Gln Val Leu Ser Ser Thr Leu Ser Ser Ala				
	245	250	255	
Leu Val Glu Leu Gln Pro Ile Thr Gly Ile Lys His Gln Leu Arg Val				
	260	265	270	
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	275	280	285	

<210> 3505

<211> 1612

<212> DNA

<213> Homo sapiens

<400> 3505

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<210> 3506

<211> 502

<212> PRT

<213> Homo sapiens

<400> 3506

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			20					25					30		
Met	Leu	Leu	Ala	Trp	Pro	Leu	Ala	Leu	Val	Ala	Ser	Leu	Gly	Ser	Ala
		35					40					45			
Glu	Lys	Glu	Pro	Glu	Gln	Pro	Pro	Ala	Leu	Trp	Arg	Lys	Val	Val	Asp
	50					55					60				
Phe	Leu	Leu	Lys	Ala	Ile	Met	Arg	Thr	Met	Trp	Phe	Ala	Gly	Gly	Phe
65					70					75				80	
His	Arg	Val	Ala	Val	Lys	Gly	Arg	Gln	Ala	Leu	Pro	Thr	Glu	Ala	Ala
				85					90					95	
Ile	Leu	Thr	Leu	Ala	Pro	His	Ser	Ser	Tyr	Phe	Asp	Ala	Ile	Pro	Val
			100					105					110		
Thr	Met	Thr	Met	Ser	Ser	Ile	Val	Met	Lys	Thr	Glu	Ser	Arg	Asp	Ile
		115					120					125			
Pro	Ile	Trp	Gly	Thr	Leu	Ile	Gln	Tyr	Ile	Arg	Pro	Val	Phe	Val	Ser
		130				135					140				
Arg	Ser	Asp	Gln	Asp	Ser	Arg	Arg	Lys	Thr	Val	Glu	Glu	Ile	Lys	Arg
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Arg	Ala	Gln	Ser	Asn	Gly	Lys	Trp	Pro	Gln	Ile	Met	Ile	Phe	Pro	Glu

				165					170					175					
Gly	Thr	Cys	Thr	Asn	Arg	Thr	Cys	Leu	Ile	Thr	Phe	Lys	Pro	Gly	Ala				
			180					185					190						
Phe	Ile	Pro	Gly	Ala	Pro	Val	His	Pro	Gly	Val	Leu	Arg	Tyr	Pro	Asn				
		195					200					205							
Lys	Leu	Asp	Thr	Ile	Thr	Trp	Thr	Trp	Gln	Gly	Pro	Gly	Ala	Leu	Glu				
	210					215				220									
Ile	Leu	Trp	Leu	Thr	Leu	Cys	Gln	Phe	His	Asn	Gln	Val	Glu	Ile	Glu				
225					230					235					240				
Phe	Leu	Pro	Val	Tyr	Ser	Pro	Ser	Glu	Glu	Glu	Lys	Arg	Asn	Pro	Ala				
			245					250					255						
Leu	Tyr	Ala	Ser	Asn	Val	Arg	Arg	Val	Met	Ala	Glu	Ala	Leu	Gly	Val				
		260						265				270							
Ser	Val	Thr	Asp	Tyr	Thr	Phe	Glu	Asp	Cys	Gln	Leu	Ala	Leu	Ala	Glu				
		275					280					285							
Gly	Gln	Leu	Arg	Leu	Pro	Ala	Asp	Thr	Cys	Leu	Leu	Glu	Phe	Ala	Arg				
	290					295				300									
Leu	Val	Arg	Gly	Leu	Gly	Leu	Lys	Pro	Glu	Lys	Leu	Glu	Lys	Asp	Leu				
305					310					315				320					
Asp	Arg	Tyr	Ser	Glu	Arg	Ala	Arg	Met	Lys	Gly	Gly	Glu	Lys	Ile	Gly				
			325					330					335						
Ile	Ala	Glu	Phe	Ala	Ala	Ser	Leu	Glu	Val	Pro	Val	Ser	Asp	Leu	Leu				
		340						345					350						
Glu	Asp	Met	Phe	Ser	Leu	Phe	Asp	Glu	Ser	Gly	Ser	Gly	Glu	Val	Asp				
		355					360					365							
Leu	Arg	Glu	Cys	Val	Val	Ala	Leu	Ser	Val	Val	Cys	Trp	Pro	Ala	Arg				
	370					375					380								
Thr	Leu	Asp	Thr	Ile	Gln	Leu	Ala	Phe	Lys	Met	Tyr	Gly	Ala	Gln	Glu				
385					390					395				400					
Asp	Gly	Ser	Val	Gly	Glu	Gly	Asp	Leu	Ser	Cys	Ile	Leu	Lys	Thr	Ala				
			405					410					415						
Leu	Gly	Val	Ala	Glu	Leu	Thr	Val	Thr	Asp	Leu	Phe	Arg	Ala	Ile	Asp				
		420						425					430						
Gln	Glu	Glu	Lys	Gly	Lys	Ile	Thr	Phe	Ala	Asp	Phe	His	Arg	Phe	Ala				
		435					440					445							
Glu	Met	Tyr	Pro	Ala	Phe	Ala	Glu	Glu	Tyr	Leu	Tyr	Pro	Asp	Gln	Thr				
	450					455					460								
His	Phe	Glu	Ser	Cys	Ala	Glu	Thr	Ser	Pro	Ala	Pro	Ile	Pro	Asn	Gly				
465					470					475				480					
Phe	Cys	Ala	Asp	Phe	Ser	Pro	Glu	Asn	Ser	Asp	Ala	Gly	Arg	Lys	Pro				
			485					490					495						
Val	Arg	Lys	Lys	Leu	Asp														
			500																

<210> 3507

<211> 885

<212> DNA

<213> Homo sapiens

<400> 3507

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120

cgagcccgt ccccggcac cgtgctcaag tccactcgc ttagtcatt gttgatgctg
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<210> 3508

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3508

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 <212> PRT
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 Glu Gly Glu Leu Pro Thr His Glu Gln Val Phe Leu Ser Pro Pro Pro
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<211> 462

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

<400> 3524

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<211> 1116

<212> DNA

<213> Homo sapiens

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<211> 304

<212> PRT

<213> Homo sapiens

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225	230	235
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260	265	270
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<211> 2838

<212> DNA

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<211> 281

<212> PRT

<213> Homo sapiens

<400> 3528

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<212> DNA

<213> Homo sapiens

<400> 3529

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Cys	Xaa	Ser	Pro	Val	Ala	Gly	Val	Ala	His	Arg	Phe	His	Ser	Thr	Cys
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Gly	Lys	Asn	Val	Thr	Leu	Glu	Glu	Asp	Gly	Thr	Arg	Ala	Val	Arg	Ala
	50					55					60				
Ala	Gly	Tyr	Ala	His	Gly	Leu	Val	Phe	Ser	Thr	Lys	Glu	Leu	Arg	Ala
65					70					75				80	
Glu	Glu	Val	Phe	Glu	Val	Lys	Val	Glu	Glu	Leu	Asp	Glu	Lys	Trp	Ala
			85						90					95	
Gly	Ser	Leu	Arg	Leu	Gly	Leu	Thr	Thr	Leu	Ala	Pro	Gly	Glu	Met	Gly
			100					105					110		
Pro	Gly	Ala	Gly	Gly	Gly	Gly	Pro	Gly	Leu	Pro	Pro	Ser	Leu	Pro	Glu
		115					120					125			
Leu	Arg	Thr	Lys	Thr	Thr	Trp	Met	Val	Ser	Ser	Cys	Glu	Val	Arg	Arg
		130				135					140				
Asp	Gly	Gln	Leu	Gln	Arg	Met	Asn	Tyr	Gly	Arg	Asn	Leu	Glu	Arg	Leu
145					150					155				160	
Gly	Val	Lys	Trp	Leu	Ala	Pro	Gly	Thr	Gly	Glu	Gly	Leu	Gly	Val	Glu
			165					170					175		
Val	Ala	Gly	Arg	Gly	Gly	Leu	Asn	Ile	Val	Arg	Pro	Cys	Pro	Thr	Ser
		180					185						190		
Val	Leu	Gly	Gly	Glu	Pro	Cys	Gly	Cys	Ser	Ser	Gly	Gly	Arg		
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<210> 3531

<211> 879

<212> DNA

<213> Homo sapiens

<400> 3531

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 120
 aaaattatta aagtgaaggt tcagaagaag gcagatatgg tgaacgaaga cttgctgagt
 180

gatggaacga gtgagaatga atctggattt tgggattcct tcaaattgggg ctttacagga
240
cagaagactg aggaagtga gcaagataaa gatgacataa ttaatatattt ctccgttgca
300
tctgggtcatc tctacgaaag atttcttcgc ataatgatgc tatccgtgct gaagaatacc
360
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420
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480
cgggtggcttc atcaacaaac tgaaaaacag cgtatcatct ggggttaciaa gatcctcttc
540
ctggatgtac ttttcccact agttgttgac aagttcctgt ttgtggatgc tgatcagatt
600
gtacgaacag atctgaaaga gttaagagat ttcaatttgg atggtgctcc ttatgggttac
660
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720
tggggccagtc atttagccgg gcgaaagtat catatcaggt actgaaaaga agcactccta
780
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<210> 3532

<211> 254

<212> PRT

<213> Homo sapiens

<400> 3532

Xaa	Ile	Leu	Arg	Leu	Arg	Lys	Gly	Arg	Ser	Glu	Asp	Ile	Tyr	Arg	Ile
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Tyr	Ser	His	Asp	Gly	Thr	Asp	Ser	Pro	Pro	Asp	Ala	Asp	Glu	Val	Val
			20					25				30			
Ile	Val	Leu	Asn	Asn	Phe	Lys	Ser	Lys	Ile	Ile	Lys	Val	Lys	Val	Gln
		35				40					45				
Lys	Lys	Ala	Asp	Met	Val	Asn	Glu	Asp	Leu	Leu	Ser	Asp	Gly	Thr	Ser
	50					55					60				
Glu	Asn	Glu	Ser	Gly	Phe	Trp	Asp	Ser	Phe	Lys	Trp	Gly	Phe	Thr	Gly
65					70					75					80
Gln	Lys	Thr	Glu	Glu	Val	Lys	Gln	Asp	Lys	Asp	Asp	Ile	Ile	Asn	Ile
				85					90					95	
Phe	Ser	Val	Ala	Ser	Gly	His	Leu	Tyr	Glu	Arg	Phe	Leu	Arg	Ile	Met
			100					105					110		
Met	Leu	Ser	Val	Leu	Lys	Asn	Thr	Lys	Thr	Pro	Val	Lys	Phe	Trp	Phe
		115					120					125			
Leu	Lys	Asn	Tyr	Leu	Ser	Pro	Thr	Phe	Lys	Glu	Phe	Ile	Pro	Tyr	Met
	130					135					140				
Ala	Asn	Glu	Tyr	Asn	Phe	Gln	Tyr	Glu	Leu	Val	Gln	Tyr	Lys	Trp	Pro
145					150					155				160	
Arg	Trp	Leu	His	Gln	Gln	Thr	Glu	Lys	Gln	Arg	Ile	Ile	Trp	Gly	Tyr
			165					170						175	
Lys	Ile	Leu	Phe	Leu	Asp	Val	Leu	Phe	Pro	Leu	Val	Val	Asp	Lys	Phe

<div> <div>180</div> <div>185</div> <div>190</div> </div>															
Leu	Phe	Val	Asp	Ala	Asp	Gln	Ile	Val	Arg	Thr	Asp	Leu	Lys	Glu	Leu
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<div> <div>210</div> <div>215</div> <div>220</div> </div>															
Asp	Ser	Arg	Arg	Glu	Met	Asp	Gly	Tyr	Arg	Phe	Trp	Lys	Ser	Gly	Tyr
<div> <div>225</div> <div>230</div> <div>235</div> </div>															
Trp	Ala	Ser	His	Leu	Ala	Gly	Arg	Lys	Tyr	His	Ile	Arg	Tyr		
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<210> 3533
<211> 1151
<212> DNA
<213> Homo sapiens
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<400>	3533				
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120					
atggacatga	ccggtggctt	gtcggtgaa	gacccatccc	agtcccagtc	acgcctcccc
180					
cagtggacgc	accccaactc	catggataac	ttgcccagtg	ccgcttcccc	cctggagcag
240					
aaccctagca	agcatgggtgc	tatccctgga	ggctctaagca	ttgggcctcc	aggtaagtc
300					
tccattgatg	actcctatgg	ccggtacgat	ttaatccaga	acagtgagtc	accagccagt
360					
cctcccgtag	ctgttcccca	tagctgggtca	cgtgccaaat	ctgacagtga	taaaatctca
420					
aatggctcta	gcatcaactg	gccccagaa	ttccatccgg	gagttccatg	gaaaggactg
480					
cagaatattg	accctgagaa	tgaccctgac	gtcactcctg	gcagtgtccc	cactgggcct
540					
accatcaaca	ccaccatcca	ggatgtcaac	cgctacctcc	tcaagagtgg	agggtcctcc
600					
ccgccatcat	ctcagaatgc	cacgctgcct	tcttcgagtg	cctggccact	cagtgcctcc
660					
ggctacagta	gctctttcag	cagcattgca	tccgcaccta	gtgttgagg	taaactgtca
720					
gacatcaaat	cgacgtggtc	ctctggccct	acctcccaca	cgcaagcctc	tctgtctcat
780					
gaactatgga	aggtgcccag	aaacagtact	gcacccacga	ggccacctcc	agggttaacc
840					
aatcccaagc	cctcctccac	ctgggggtgcc	agccccctcg	gctggaccag	ctcctactcc
900					
tcgggttctg	cctgggagcac	cgacacctca	ggaagaacca	gcagctggct	cgttcttcga
960					
aacctcaetc	cccagggtgca	atatgggtgcc	cctgcatcac	tgagcatgat	ccagggaggg
1020					
ttcccgcctg	gcccccaatg	cagatgaggc	tgtctgggtg	ggcaggatag	ttgggggttc
1080					
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1140					

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1151

<210> 3534
<211> 313
<212> PRT
<213> Homo sapiens

<400> 3534
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20 25 30
Met Asp Asn Leu Pro Ser Ala Ala Ser Pro Leu Glu Gln Asn Pro Ser
35 40 45
Lys His Gly Ala Ile Pro Gly Gly Leu Ser Ile Gly Pro Pro Gly Lys
50 55 60
Ser Ser Ile Asp Asp Ser Tyr Gly Arg Tyr Asp Leu Ile Gln Asn Ser
65 70 75 80
Glu Ser Pro Ala Ser Pro Pro Val Ala Val Pro His Ser Trp Ser Arg
85 90 95
Ala Lys Ser Asp Ser Asp Lys Ile Ser Asn Gly Ser Ser Ile Asn Trp
100 105 110
Pro Pro Glu Phe His Pro Gly Val Pro Trp Lys Gly Leu Gln Asn Ile
115 120 125
Asp Pro Glu Asn Asp Pro Asp Val Thr Pro Gly Ser Val Pro Thr Gly
130 135 140
Pro Thr Ile Asn Thr Thr Ile Gln Asp Val Asn Arg Tyr Leu Leu Lys
145 150 155 160
Ser Gly Gly Ser Ser Pro Pro Ser Ser Gln Asn Ala Thr Leu Pro Ser
165 170 175
Ser Ser Ala Trp Pro Leu Ser Ala Ser Gly Tyr Ser Ser Ser Phe Ser
180 185 190
Ser Ile Ala Ser Ala Pro Ser Val Ala Gly Lys Leu Ser Asp Ile Lys
195 200 205
Ser Thr Trp Ser Ser Gly Pro Thr Ser His Thr Gln Ala Ser Leu Ser
210 215 220
His Glu Leu Trp Lys Val Pro Arg Asn Ser Thr Ala Pro Thr Arg Pro
225 230 235 240
Pro Pro Gly Leu Thr Asn Pro Lys Pro Ser Ser Thr Trp Gly Ala Ser
245 250 255
Pro Leu Gly Trp Thr Ser Ser Tyr Ser Ser Gly Ser Ala Trp Ser Thr
260 265 270
Asp Thr Ser Gly Arg Thr Ser Ser Trp Leu Val Leu Arg Asn Leu Thr
275 280 285
Pro Gln Val Gln Tyr Gly Ala Pro Ala Ser Leu Ser Met Ile Gln Gly
290 295 300
Gly Phe Pro Leu Gly Pro Gln Cys Arg
305 310

<210> 3535
<211> 723
<212> DNA
<213> Homo sapiens

<400> 3535
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 120
 cggcagacct gctacagggt ctctctgctg gtgaccaccc accccacaac cactcaagaa
 180
 gcctcatcaa aacattgttg gagaaaactg ggtgcccacg gaggagaaac ggaatgcaag
 240
 gagattgcaa tctgtgcttt gaaccagatg cactattact aatagctgga ggaaattttg
 300
 aagatcagct tagagaagaa gtggtccaga gagtttctct tctccttctc tattacatta
 360
 ttcacagga agagatctgt tcttcaaagc tcaacatgag taataaagag tataaatttt
 420
 acctacacag cctactgagc ctcaggcagg atgaagattc ctctttcctt tcacagaatg
 480
 agacagaaga tatcttggtt ttcaccaggc agtactttga cactttctcaa agccagtgtg
 540
 tggaaccaa aacgctgcag aaaaaatctg gaatagttag cagtgaaggt gctaataaaa
 600
 gtacgcttcc tcagttggca gccatgatca ttactttgtc cctccagggt gtttgtctgg
 660
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 720
 gta
 723

<210> 3536
 <211> 163
 <212> PRT
 <213> Homo sapiens

<400> 3536
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 Ile Ala Gly Gly Asn Phe Glu Asp Gln Leu Arg Glu Glu Val Val Gln
 20 25 30
 Arg Val Ser Leu Leu Leu Tyr Ile Ile His Gln Glu Glu Ile
 35 40 45
 Cys Ser Ser Lys Leu Asn Met Ser Asn Lys Glu Tyr Lys Phe Tyr Leu
 50 55 60
 His Ser Leu Leu Ser Leu Arg Gln Asp Glu Asp Ser Ser Phe Leu Ser
 65 70 75 80
 Gln Asn Glu Thr Glu Asp Ile Leu Ala Phe Thr Arg Gln Tyr Phe Asp
 85 90 95
 Thr Ser Gln Ser Gln Cys Met Glu Thr Lys Thr Leu Gln Lys Lys Ser
 100 105 110
 Gly Ile Val Ser Ser Glu Gly Ala Asn Glu Ser Thr Leu Pro Gln Leu
 115 120 125
 Ala Ala Met Ile Ile Thr Leu Ser Leu Gln Gly Val Cys Leu Gly Gln
 130 135 140
 Gly Asn Leu Pro Ser Pro Asp Tyr Phe Thr Glu Tyr Ile Phe Ser Ser

145
Leu Asn Arg

150

155

160

<210> 3537

<211> 714

<212> DNA

<213> Homo sapiens

<400> 3537

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120
cataaggcca agagtaagtg cgtgaatgca ctttaagaca agtcaggaca cgagcttcac
180
atgacaggcc ccgctgtggg gaccagccag ccctggggac gggcacgcca cgccacacac
240
acactcacca ctgtacagcc tgggactccc attgcatatt cacaggcccc gccgggcagg
300
gcacctcaag gctgggggag gggcaggggc agggaggagc cgtgggggtgt ccctgggtgg
360
gtgggagagg cagcatgtga gaggcaaatt tgcaccaaca ctgggcgtga gacgtgagca
420
gcctcagggt tacggcatga gatgtgtgtg gttgggggggt gtctgcgtga cccgggaggg
480
gggtgtgtgt gagatgagca cacgaggcat gcgtggcacg tgctcgtgtg gtggtcgcgt
540
gcctgaatcc aggggctacc ccctgtccgg ctgtggccct cggtcctgca gggttggaag
600
aagggtcctt cagacgtgcc cctaccagc aggcacagaa atgtttgcat aagggtccagc
660
tcaggcagga gctctggggc cctggcccag gccagtggtg tgcgtgcatg gccca
714

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<210> 3538

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3538

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Met His Ala His Thr Gly Pro Gly Pro Gly Pro Gln Ser Ser Cys Leu
1          5          10          15
Ser Trp Thr Leu Cys Lys His Phe Cys Ala Cys Trp Val Gly Ala Arg
20          25          30
Leu Lys Asp Pro Ser Ser Asn Pro Ala Gly Pro Arg Ala Thr Ala Gly
35          40          45
Gln Gly Val Ala Pro Gly Phe Arg His Ala Thr Thr Thr Arg Ala Arg
50          55          60
Ala Thr His Ala Ser Cys Ala His Leu Thr His Thr Pro Leu Pro Gly
65          70          75          80
His Ala Asp Thr Pro Gln Pro His Thr Ser His Ala Val His Leu Arg
85          90          95
Leu Leu Thr Ser His Ala Gln Cys Trp Cys Thr Phe Ala Ser His Met

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                100                105                110
Leu Pro Ser Pro Pro Thr Gln Gly His Pro Thr Ala Pro Pro Cys Pro
                115                120                125
Cys Pro Ser Pro Ser Leu Glu Val Pro Cys Pro Ala Gly Pro Val Asn
                130                135                140
Met Gln Trp Glu Ser Gln Ala Val Gln Trp
145                150

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<210> 3539

<211> 818

<212> DNA

<213> Homo sapiens

<400> 3539

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120
cggggggcgg aggttgacgt gagccgagat cgcgcaggta cgctccagtc tgggcgacaa
180
gagcgaaact cgatatcaaa aaaaaaaaaa acgtcctgat cccagagcct cttcacgcgt
240
cccctaccac agcacttcag agaagcaggt ctttaatcag tgtgtctaga tgcagctgct
300
gactgtcacc cctaccccg ctcctctcca gtctgaggac ggccagtcac cccattgccc
360
cagaatcaga cgaccctcgg ttcttccaga gccaagctgg gcaacttccc ctggcaagcc
420
ttcaccagta tccacggccg tggggggcgg gccctgctgg gggacagatg gatcctcact
480
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540
gtgttcttgg gccacacagc catagatgag atgctgaaac tggggaacca ccctgtccac
600
cgtgtcgttg tgcaccccga ctaccgtcag aatgagtccc ataactttag cggggacatc
660
gccctcctgg agctgcagca cagcatcccc ctgggccccca acgtcctccc ggtctgtctg
720
cccgataatg agaccctcta ccgcagcggc ttgttgggct acgtcagtgg gtttggcatg
780
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818

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<210> 3540

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3540

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Ser Val Cys Leu Asp Ala Ala Ala Asp Cys His Pro Tyr Pro Ala Ser
1          5          10          15
Leu Pro Val Cys Gly Arg Pro Val Thr Pro Ile Ala Gln Asn Gln Thr
20          25          30
Thr Leu Gly Ser Ser Arg Ala Lys Leu Gly Asn Phe Pro Trp Gln Ala

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<210> 3542

<211> 153
 <212> PRT
 <213> Homo sapiens

<400> 3542

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Arg	Met	Leu	Ser	Phe	Gln	Gly	Leu	Ala	Glu	Leu	Ala	His	Arg	Glu	Tyr
		20						25					30		
Gln	Ala	Gly	Asp	Phe	Glu	Ala	Ala	Glu	Arg	His	Cys	Met	Gln	Leu	Trp
		35					40					45			
Arg	Gln	Glu	Pro	Asp	Asn	Thr	Gly	Val	Leu	Leu	Leu	Leu	Ser	Ser	Ile
	50					55					60				
His	Phe	Gln	Cys	Arg	Arg	Leu	Asp	Arg	Ser	Ala	His	Phe	Ser	Thr	Leu
65					70					75					80
Ala	Ile	Lys	Gln	Asn	Pro	Leu	Leu	Ala	Glu	Ala	Tyr	Ser	Asn	Leu	Gly
			85						90					95	
Asn	Val	Tyr	Lys	Glu	Arg	Gly	Gln	Leu	Gln	Glu	Ala	Ile	Glu	His	Tyr
		100						105					110		
Arg	His	Ala	Leu	Arg	Leu	Lys	Pro	Asp	Phe	Ile	Asp	Gly	Tyr	Ile	Asn
		115				120						125			
Ala	Ala	Ala	Ala	Leu	Val	Ala	Ala	Gly	Asp	Met	Glu	Gly	Ala	Val	Gln
	130					135					140				
Ala	Tyr	Val	Ser	Ala	Leu	Gln	Pro	Gly							
145						150									

<210> 3543
 <211> 1206
 <212> DNA
 <213> Homo sapiens

<400> 3543

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120
gtttgggtgt tgctcaggat gtgtaatagt ttctcttcag ccataagcca cgcctggtag
180
atattaattg agtggagaga tcttgcacct cttccagtta tgcatttggtg gtttgctgctc
240
tgatttggag cacttggag atcactgttt tgtgttctac gacccaattg agaggattat
300
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360
gattgcaaaa tgggtctccg gattcacttt gttgttgacc cacatgggtg gtgctgcatg
420
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480
cctcactatg aagaaggaca tattccaggc atattaataa taatattcta tggcatttcc
540
atattctgtc tgggtgcctt agtgagggcc tccataactg atccaggaag actccctgag
600
aaccceaaga tcccatgag agaaaggag ttctgggaat tatgtaacaa gtgtaatttg
660

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atgagaccaa agcggtccca tcaactgtagc cgctgcggcc actgtgtgag gagaatggat
 720
 catcactgtc catggattaa caattgtggt ggtgaagata atcattggct ctttctgcag
 780
 ttgtgtttct aactgaact tcttacttgc tacgcactga tgttttcttt ctgccactat
 840
 tactattttc ttccactaaa aaagcgtaat ttggacctct ttgttttttag acatgaattg
 900
 gccataatga gactagcagc ctttatgggc attactatgt tagttggaat aactggactc
 960
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 1020
 tctgtatcca acaacagtct tggagatctc atgaagattt ctgaaacttt tgctctgagg
 1080
 ataccttctt ttgtgggttat gtgccctgaa aactccagcc tccgtgtctt caattcagtg
 1140
 aaactactac tctgcttgga ttccccctctt atacaatggt ctaccaagtg actgcaaaca
 1200
 gaaatc
 1206

<210> 3544

<211> 273

<212> PRT

<213> Homo sapiens

<400> 3544

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Met	Gly	Leu	Ile	Val	Phe	Val	Trp	Leu	Tyr	Asn	Ile	Val	Leu	Ile	Pro
			20					25					30		
Lys	Ile	Val	Leu	Phe	Pro	His	Tyr	Glu	Glu	Gly	His	Ile	Pro	Gly	Ile
		35					40					45			
Leu	Ile	Ile	Ile	Phe	Tyr	Gly	Ile	Ser	Ile	Phe	Cys	Leu	Val	Ala	Leu
	50					55					60				
Val	Arg	Ala	Ser	Ile	Thr	Asp	Pro	Gly	Arg	Leu	Pro	Glu	Asn	Pro	Lys
65					70					75					80
Ile	Pro	His	Gly	Glu	Arg	Glu	Phe	Trp	Glu	Leu	Cys	Asn	Lys	Cys	Asn
			85					90					95		
Leu	Met	Arg	Pro	Lys	Arg	Ser	His	His	Cys	Ser	Arg	Cys	Gly	His	Cys
			100					105					110		
Val	Arg	Arg	Met	Asp	His	His	Cys	Pro	Trp	Ile	Asn	Asn	Cys	Val	Gly
			115				120					125			
Glu	Asp	Asn	His	Trp	Leu	Phe	Leu	Gln	Leu	Cys	Phe	Tyr	Thr	Glu	Leu
	130					135					140				
Leu	Thr	Cys	Tyr	Ala	Leu	Met	Phe	Ser	Phe	Cys	His	Tyr	Tyr	Tyr	Phe
145					150					155					160
Leu	Pro	Leu	Lys	Lys	Arg	Asn	Leu	Asp	Leu	Phe	Val	Phe	Arg	His	Glu
				165				170						175	
Leu	Ala	Ile	Met	Arg	Leu	Ala	Ala	Phe	Met	Gly	Ile	Thr	Met	Leu	Val
			180					185					190		
Gly	Ile	Thr	Gly	Leu	Phe	Tyr	Thr	Gln	Leu	Ile	Gly	Ile	Ile	Thr	Pro
		195					200					205			
Cys	Ser	Leu	Ile	Leu	Leu	Lys	Cys	Gly	Ser	Val	Ser	Asn	Asn	Ser	Leu

210	215	220
Gly Asp Leu Met Lys Ile Ser Glu Thr Phe Ala Leu Arg Ile Pro Ser		
225	230	235
Phe Val Val Met Cys Pro Glu Asn Ser Ser Leu Arg Val Phe Asn Ser		240
	245	250
Val Lys Leu Leu Leu Cys Leu Asp Ser Pro Leu Ile Gln Trp Ser Thr		255
	260	265
		270

Lys

<210> 3545

<211> 3657

<212> DNA

<213> Homo sapiens

<400> 3545

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<212> PRT

<213> Homo sapiens

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Lys Ala Gly Gln Thr	Leu Gln Ala Glu Leu Leu	Val Val Tyr Gly Ala
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275	280	285
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Ser Asp Leu Asp Asp	Gln His Asp Tyr Asp	Ser Val Ala Ser Asp Glu
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Asp Thr Asp Gln Glu	Pro Leu Arg Ser Thr	Gly Ala Thr Arg Ser Asn
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515	520	525
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530	535	540
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<212> DNA
<213> Homo sapiens
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Arg	Glu	Ala	Gly	Pro	Asn	Pro	Ser	Arg	Pro	Thr	Ser	Trp	Lys	Ser	Asp
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Gly	Ser	Met	Ser	Thr	Asp	Lys	Arg	Glu	Thr	Arg	Val	Glu	Arg	Pro	Glu
	355					360						365			
Arg	Ser	Gly	Arg	Glu	Val	Ser	Gly	His	Ser	Val	Arg	Gly	Ala	Pro	Pro

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      370              375              380
Gly Asn Arg Ser Ser Ala Ser Gly Tyr Gly Ser Arg Glu Gly Asp Arg
385              390              395              400
Gly Val Ile Thr Asp Arg Gly Gly Gly Ser Gln His Tyr Pro Glu Glu
      405              410              415
Arg His Val Val Glu Arg His Gly Arg Asp Thr Ser Gly Pro Arg Lys
      420              425              430
Glu Trp His Gly Pro Pro Ser Gln Gly Pro Ser Tyr His Asp Thr Arg
      435              440              445
Arg Met Gly Asp Gly Arg Ala Gly Ala Gly Met Ile Thr Gln His Ser
      450              455              460
Ser Asn Ala Ser Pro Ile Asn Arg Ile Val Gln Ile Ser Gly Asn Ser
465              470              475              480
Met Pro Arg Gly Ser Gly Ser Gly Phe Lys Pro Phe Lys Gly Gly Pro
      485              490              495
Pro Arg Arg Phe
      500

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<210> 3551

<211> 545

<212> DNA

<213> Homo sapiens

<400> 3551

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60
atttcttaag ataattgaga aagataaaact tctttttcag gaggggtccat cttcctgcca
120
tttcttgtga ctggctataa attccatgca gtgctggaat gtgcttctca cagttagagt
180
gctgagcacc tgttttattt cacactccct tgattcctgg ggtaaatccc atctccgcag
240
catgggctcc agttaaattc attagtgggc cagatgtgtg tcccctgtca gctggccaag
300
taacccact gtttatcgac aggttctcag gaatcagata gctcgcagtc ggccaagaag
360
gacatgctgg ctgccttgaa gtccaggcag gaagctctgg aggaaacct gcgtcagagg
420
ctggaggaac tgaagaagct gtgtctccga gaagctgtaa gcctttccta gtcacatccc
480
ttgaaattgg tgttgtctgt gatgtcactg atctttctga tgtcatttga tctttttgat
540
gtcat
545

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<210> 3552

<211> 55

<212> PRT

<213> Homo sapiens

<400> 3552

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Pro His Cys Leu Ser Thr Gly Ser Gln Glu Ser Asp Ser Ser Gln Ser
1          5          10          15
Ala Lys Lys Asp Met Leu Ala Ala Leu Lys Ser Arg Gln Glu Ala Leu

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	20		25		30										
Glu	Glu	Thr	Leu	Arg	Gln	Arg	Leu	Glu	Glu	Leu	Lys	Lys	Leu	Cys	Leu
	35		40		45										
Arg	Glu	Ala	Val	Ser	Leu	Ser									
	50		55												

<210> 3553
 <211> 1412
 <212> DNA
 <213> Homo sapiens

<400> 3553
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 60
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 120
 gatgaccagc tcaacatcct gcccatctcc tcccacgttg ccaccatgga ggccctgcct
 180
 cccagactc cggatgagag tcttggtcct tctgatctgg agctgaggga gttgaaggag
 240
 agcttgagg acaccagcc tgtgggtgtg ttgggtggact gctgtaagac tctagaccag
 300
 gccaaagctg tcttgaaatt tatcgagggc atctctgaaa agaccctgag gagtactgtt
 360
 gcactcacag ctgctcgagg acggggaaaa tctgcagccc tgggattggc gattgctggg
 420
 gcggtggcat ttgggtactc caatatcttt gttacctccc caagccctga taacctccat
 480
 actctgtttg aatttgtatt taaaggattt gatgctctgc aatatcagga acatctggat
 540
 tatgagatta tccagtctct aaatcctgaa ttaacaaaag cagtgatcat agtgaatgta
 600
 tttcgagaac acaggcagac tattcagtat atacatcctg cagatgctgt gaagctgggc
 660
 caggctgaac tagttgtgat tgatgaagct gccgccatcc cctccccctt ggtgaagagc
 720
 ctacttgccc cctaccttgt tttcatggca tccaccatca atggctatga gggcactggc
 780
 cggtcactgt ccctcaagct aattcagcag ctccgtcaac agagcgccca gagccaggtc
 840
 agcaccactg ctgagaataa gaccacgacg acagccagat tggcatcagc gcggacactg
 900
 catgaggttt ccctccagga gtcaatccga tacgcccctg gggatgcagt ggagaagtgg
 960
 ctgaatgact tgctgtgcct ggattgcctc aacatcactc ggatagtctc aggctgcccc
 1020
 ttgcctgaag cttgtgaact gtactatgtt aatagagata cctctttttg ctaccacaag
 1080
 gcctctgaag ttttccctcca acggcttatg gccctctacg tggcttctca ctacaagaac
 1140
 tctcccaatg atctccagat gctctccgat gcaccttctc accatctctt ctgccttctg
 1200
 cctcctgtgc cccccacca gaatgccctt ccaaaagtgc ttgctgttat ccagggtatag
 1260

gaacagagggc gtccttgtgg cagtgatttg ggggaaccact gaggcacag gaattagtgg
 1320
 cttaataact gcattgtggg agttttgaaa ctgtggagtc ctggtctgga accaaggggc
 1380
 tgggtctgct gagacaggtg actagggtgc ac
 1412

<210> 3554

<211> 419

<212> PRT

<213> Homo sapiens

<400> 3554

Tyr	Thr	Val	Thr	Met	Asp	Val	His	Ser	Arg	Tyr	Arg	Thr	Glu	Ala	His
1				5					10					15	
Gln	Asp	Val	Val	Gly	Arg	Phe	Asn	Glu	Arg	Phe	Ile	Leu	Ser	Leu	Ala
		20						25					30		
Ser	Cys	Lys	Lys	Cys	Leu	Val	Ile	Asp	Asp	Gln	Leu	Asn	Ile	Leu	Pro
		35					40					45			
Ile	Ser	Ser	His	Val	Ala	Thr	Met	Glu	Ala	Leu	Pro	Pro	Gln	Thr	Pro
	50					55					60				
Asp	Glu	Ser	Leu	Gly	Pro	Ser	Asp	Leu	Glu	Leu	Arg	Glu	Leu	Lys	Glu
65					70				75					80	
Ser	Leu	Gln	Asp	Thr	Gln	Pro	Val	Gly	Val	Leu	Val	Asp	Cys	Cys	Lys
			85					90					95		
Thr	Leu	Asp	Gln	Ala	Lys	Ala	Val	Leu	Lys	Phe	Ile	Glu	Gly	Ile	Ser
		100						105					110		
Glu	Lys	Thr	Leu	Arg	Ser	Thr	Val	Ala	Leu	Thr	Ala	Ala	Arg	Gly	Arg
		115				120						125			
Gly	Lys	Ser	Ala	Ala	Leu	Gly	Leu	Ala	Ile	Ala	Gly	Ala	Val	Ala	Phe
	130					135					140				
Gly	Tyr	Ser	Asn	Ile	Phe	Val	Thr	Ser	Pro	Ser	Pro	Asp	Asn	Leu	His
145				150					155					160	
Thr	Leu	Phe	Glu	Phe	Val	Phe	Lys	Gly	Phe	Asp	Ala	Leu	Gln	Tyr	Gln
			165					170					175		
Glu	His	Leu	Asp	Tyr	Glu	Ile	Ile	Gln	Ser	Leu	Asn	Pro	Glu	Phe	Asn
		180					185					190			
Lys	Ala	Val	Ile	Ile	Val	Asn	Val	Phe	Arg	Glu	His	Arg	Gln	Thr	Ile
	195					200						205			
Gln	Tyr	Ile	His	Pro	Ala	Asp	Ala	Val	Lys	Leu	Gly	Gln	Ala	Glu	Leu
	210					215					220				
Val	Val	Ile	Asp	Glu	Ala	Ala	Ala	Ile	Pro	Leu	Pro	Leu	Val	Lys	Ser
225				230					235					240	
Leu	Leu	Gly	Pro	Tyr	Leu	Val	Phe	Met	Ala	Ser	Thr	Ile	Asn	Gly	Tyr
			245					250					255		
Glu	Gly	Thr	Gly	Arg	Ser	Leu	Ser	Leu	Lys	Leu	Ile	Gln	Gln	Leu	Arg
		260					265					270			
Gln	Gln	Ser	Ala	Gln	Ser	Gln	Val	Ser	Thr	Thr	Ala	Glu	Asn	Lys	Thr
	275					280						285			
Thr	Thr	Thr	Ala	Arg	Leu	Ala	Ser	Ala	Arg	Thr	Leu	His	Glu	Val	Ser
	290				295						300				
Leu	Gln	Glu	Ser	Ile	Arg	Tyr	Ala	Pro	Gly	Asp	Ala	Val	Glu	Lys	Trp
305				310					315					320	
Leu	Asn	Asp	Leu	Leu	Cys	Leu	Asp	Cys	Leu	Asn	Ile	Thr	Arg	Ile	Val

				325					330					335					
Ser	Gly	Cys	Pro	Leu	Pro	Glu	Ala	Cys	Glu	Leu	Tyr	Tyr	Val	Asn	Arg				
			340					345					350						
Asp	Thr	Leu	Phe	Cys	Tyr	His	Lys	Ala	Ser	Glu	Val	Phe	Leu	Gln	Arg				
		355					360					365							
Leu	Met	Ala	Leu	Tyr	Val	Ala	Ser	His	Tyr	Lys	Asn	Ser	Pro	Asn	Asp				
	370					375					380								
Leu	Gln	Met	Leu	Ser	Asp	Ala	Pro	Ser	His	His	Leu	Phe	Cys	Leu	Leu				
385					390					395					400				
Pro	Pro	Val	Pro	Pro	Thr	Gln	Asn	Ala	Leu	Pro	Lys	Val	Leu	Ala	Val				
				405					410					415					
Ile	Gln	Val																	

<210> 3555

<211> 1038

<212> DNA

<213> Homo sapiens

<400> 3555

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nngccggccg cgccccgggct gggacgtccg agcgggaaga tgttttccgc cctgaagaag
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ctggtgggggt cggaccaggc cccggggccgg gacaagaaca tccccgccgg gctgcagtcc
120
atgaaccagg cgttgcagag gcgcttcgcc aaggggggtgc agtacaacat gaagatagtg
180
atccggggag acaggaacac gggcaagaca gcgctgtggc accgcctgca gggccggccg
240
ttcgtggagg agtacatccc cacacaggag atccaggtca ccagcatcca ctggagctac
300
aagaccacgg atgacatcgt gaagggttga gtctgggatg tagtagacaa aggaaaatgc
360
aaaaagcgag gcgacggctt aaagatggag aacgaccccc aggaggcgga gtctgaaatg
420
gccctggatg ctgagttcct ggacgtgtac aagaactgca acggggtggt catgatgttc
480
gacattacca agcagtggac cttcaattac attctccggg agcttccaaa agtgcccacc
540
cacgtgccag tgtgcgtgct ggggaactac cgggacatgg gcgagcaccg agtcacnnc
600
tgccggacgn acgtgcgtga cttcatcgac aacctggaca gacctccagg ttcctcctac
660
ttccgctatg ctgagtcttc catgaagaac agcttcggcc taaagtacct tcataagttc
720
ttcaatatcc catttttgca gcttcagagg gagacgctgt tgccggcagct ggagacgaac
780
cagctggaca tggacgccac gctggaggag ctgtcgggtgc agcaggagac ggaggaccag
840
aactacggca tcttcctgga gatgatggag gctcgcagcc gtggccatgc gtccccactg
900
gcggccaacg ggcagagccc atccccgggc tcccagtcac cagtgggtgcc tgcaggcgct
960
gtgtccacgg ggagctccag ccccggcaca gccagcccg cccacagct gccctcaat
1020

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ggttgccccca ccatectc
1038

<210> 3556

<211> 333

<212> PRT

<213> Homo sapiens

<400> 3556

Met	Phe	Ser	Ala	Leu	Lys	Lys	Leu	Val	Gly	Ser	Asp	Gln	Ala	Pro	Gly
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Arg	Asp	Lys	Asn	Ile	Pro	Ala	Gly	Leu	Gln	Ser	Met	Asn	Gln	Ala	Leu
			20					25					30		
Gln	Arg	Arg	Phe	Ala	Lys	Gly	Val	Gln	Tyr	Asn	Met	Lys	Ile	Val	Ile
			35				40					45			
Arg	Gly	Asp	Arg	Asn	Thr	Gly	Lys	Thr	Ala	Leu	Trp	His	Arg	Leu	Gln
	50					55					60				
Gly	Arg	Pro	Phe	Val	Glu	Glu	Tyr	Ile	Pro	Thr	Gln	Glu	Ile	Gln	Val
65					70					75				80	
Thr	Ser	Ile	His	Trp	Ser	Tyr	Lys	Thr	Thr	Asp	Asp	Ile	Val	Lys	Val
				85					90					95	
Glu	Val	Trp	Asp	Val	Val	Asp	Lys	Gly	Lys	Cys	Lys	Lys	Arg	Gly	Asp
			100					105					110		
Gly	Leu	Lys	Met	Glu	Asn	Asp	Pro	Gln	Glu	Ala	Glu	Ser	Glu	Met	Ala
		115					120					125			
Leu	Asp	Ala	Glu	Phe	Leu	Asp	Val	Tyr	Lys	Asn	Cys	Asn	Gly	Val	Val
	130					135					140				
Met	Met	Phe	Asp	Ile	Thr	Lys	Gln	Trp	Thr	Phe	Asn	Tyr	Ile	Leu	Arg
145					150					155					160
Glu	Leu	Pro	Lys	Val	Pro	Thr	His	Val	Pro	Val	Cys	Val	Leu	Gly	Asn
				165					170					175	
Tyr	Arg	Asp	Met	Gly	Glu	His	Arg	Val	Ile	Xaa	Cys	Arg	Thr	Xaa	Val
		180					185						190		
Arg	Asp	Phe	Ile	Asp	Asn	Leu	Asp	Arg	Pro	Pro	Gly	Ser	Ser	Tyr	Phe
		195					200				205				
Arg	Tyr	Ala	Glu	Ser	Ser	Met	Lys	Asn	Ser	Phe	Gly	Leu	Lys	Tyr	Leu
	210					215					220				
His	Lys	Phe	Phe	Asn	Ile	Pro	Phe	Leu	Gln	Leu	Gln	Arg	Glu	Thr	Leu
225				230						235				240	
Leu	Arg	Gln	Leu	Glu	Thr	Asn	Gln	Leu	Asp	Met	Asp	Ala	Thr	Leu	Glu
				245					250					255	
Glu	Leu	Ser	Val	Gln	Gln	Glu	Thr	Glu	Asp	Gln	Asn	Tyr	Gly	Ile	Phe
			260					265					270		
Leu	Glu	Met	Met	Glu	Ala	Arg	Ser	Arg	Gly	His	Ala	Ser	Pro	Leu	Ala
		275					280					285			
Ala	Asn	Gly	Gln	Ser	Pro	Ser	Pro	Gly	Ser	Gln	Ser	Pro	Val	Val	Pro
	290					295					300				
Ala	Gly	Ala	Val	Ser	Thr	Gly	Ser	Ser	Ser	Pro	Gly	Thr	Ala	Gln	Pro
305					310					315				320	
Ala	Pro	Gln	Leu	Pro	Leu	Asn	Gly	Cys	Pro	Thr	Ile	Leu			
				325					330						

<210> 3557

<211> 486

<212> DNA

<213> Homo sapiens

<400> 3557

tcagtgacaa ggaggacgtt tgggcacagc ggcattgcag tgcacacgtg gstatgcatgt
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ccggcattga tcaagtccat ctgggctatg gccataagcc aacaccagtt ctatctggac
120
agaaagcaga gtaagtccaa aatccatgca gcacgcagcc tgagtgagat cgccatcgac
180
ctgaccgaga cggggacgct gaagacctcg aagctggcca acatgggtag caaggggaag
240
atcatcagcg gcagcagcgg cagcctgctg tcttcaggat ctggtgccag gagacactgc
300
attctactcc caggttctca ggaatcagat agctcgagc cggccaagaa ggacatgctg
360
gctgccttga agtccaggca ggaagctctg gaggaacccc tgcgtcagag gctggaggaa
420
ctgaagaagc tgtgtctccg agaagctgag ctcacgggca agctgccagt agaatatccc
480
ctggat
486

<210> 3558

<211> 162

<212> PRT

<213> Homo sapiens

<400> 3558

Ser	Val	Thr	Arg	Arg	Thr	Phe	Gly	His	Ser	Gly	Ile	Ala	Val	His	Thr
1				5				10					15		
Trp	Tyr	Ala	Cys	Pro	Ala	Leu	Ile	Lys	Ser	Ile	Trp	Ala	Met	Ala	Ile
			20					25					30		
Ser	Gln	His	Gln	Phe	Tyr	Leu	Asp	Arg	Lys	Gln	Ser	Lys	Ser	Lys	Ile
		35					40				45				
His	Ala	Ala	Arg	Ser	Leu	Ser	Glu	Ile	Ala	Ile	Asp	Leu	Thr	Glu	Thr
	50					55				60					
Gly	Thr	Leu	Lys	Thr	Ser	Lys	Leu	Ala	Asn	Met	Gly	Ser	Lys	Gly	Lys
65					70					75				80	
Ile	Ile	Ser	Gly	Ser	Ser	Gly	Ser	Leu	Leu	Ser	Ser	Gly	Ser	Gly	Ala
			85					90						95	
Arg	Arg	His	Cys	Ile	Leu	Leu	Pro	Gly	Ser	Gln	Glu	Ser	Asp	Ser	Ser
			100					105					110		
Gln	Ser	Ala	Lys	Lys	Asp	Met	Leu	Ala	Ala	Leu	Lys	Ser	Arg	Gln	Glu
		115					120					125			
Ala	Leu	Glu	Glu	Thr	Leu	Arg	Gln	Arg	Leu	Glu	Glu	Leu	Lys	Lys	Leu
	130					135				140					
Cys	Leu	Arg	Glu	Ala	Glu	Leu	Thr	Gly	Lys	Leu	Pro	Val	Glu	Tyr	Pro
145					150					155					160
Leu	Asp														

<210> 3559

<211> 673

<212> DNA

<213> Homo sapiens

<400> 3559

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ggccgcggct ccccgccacc tgcggccatg gatgaggagc gcgccctcta catcgccgg
120
gccggcgaag caggggctat cgagcgggtc ctgagggatt acagcgacaa gcatagggct
180
actttcaaatt ttgaatcaac agatgaagat aaaagaaaga aactctgtga aggcatattt
240
aaagtcctta taaaggacat cccaacaaca tgtcaagtgt cctgcctgga agtactccgc
300
attctctcca gagacaaaaa gggttttagtt cctgtgacaa ctaaggaaaa tatgcagata
360
ctgctgcgac tagccaagct aaatgagtta gatgattctt tggagaaagt atcagagttc
420
ccagttattg tggagtcatt aaaatgtctg tgtaatatag tgttcaacag tcagatggca
480
cagcagctca gcctggaact taatcttgct gcaaagctct gtaacctcct gagaaagtgc
540
aaggaccgga aatttatcaa tgacattaag tgctttgact tgcgcttgct cttccttctg
600
tcacttttgc acaccgacat caggtcacaa ttgcgctatg agctccaggg actaccgctg
660
ctaacgcaga tcg
673

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<210> 3560

<211> 195

<212> PRT

<213> Homo sapiens

<400> 3560

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Met Asp Glu Glu Arg Ala Leu Tyr Ile Val Arg Ala Gly Glu Ala Gly
1      5      10      15
Ala Ile Glu Arg Val Leu Arg Asp Tyr Ser Asp Lys His Arg Ala Thr
20     25     30
Phe Lys Phe Glu Ser Thr Asp Glu Asp Lys Arg Lys Lys Leu Cys Glu
35     40     45
Gly Ile Phe Lys Val Leu Ile Lys Asp Ile Pro Thr Thr Cys Gln Val
50     55     60
Ser Cys Leu Glu Val Leu Arg Ile Leu Ser Arg Asp Lys Lys Val Leu
65     70     75     80
Val Pro Val Thr Thr Lys Glu Asn Met Gln Ile Leu Leu Arg Leu Ala
85     90     95
Lys Leu Asn Glu Leu Asp Asp Ser Leu Glu Lys Val Ser Glu Phe Pro
100    105    110
Val Ile Val Glu Ser Leu Lys Cys Leu Cys Asn Ile Val Phe Asn Ser
115    120    125
Gln Met Ala Gln Gln Leu Ser Leu Glu Leu Asn Leu Ala Ala Lys Leu
130    135    140
Cys Asn Leu Leu Arg Lys Cys Lys Asp Arg Lys Phe Ile Asn Asp Ile

```



```

145          150          155          160
Lys Cys Phe Asp Leu Arg Leu Leu Phe Leu Leu Ser Leu Leu His Thr
          165          170          175
Asp Ile Arg Ser Gln Leu Arg Tyr Glu Leu Gln Gly Leu Pro Leu Leu
          180          185          190
Thr Gln Ile
          195

```

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<210> 3561
<211> 523
<212> DNA
<213> Homo sapiens

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<400> 3561
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120
ggagggcatg agacgcctat tgcagagctg ctcaccagaa ggtcacagga atttagaaga
180
gaagctccta cctgcccccg atcatgcacg tggccactga ggatgccaga cgaggtgatg
240
ctggtctcat agagaatgta cccgaaggac tgtccatttc cccattgac tggcaggttc
300
tccatgttga tgggcttttc agacttgatt ggctgcgtac agaagagatg gaggggtggg
360
caggctcagg aggagtgggg tcacagacag actctgcttg ggggctggca catgggggtgg
420
aagcggaggt ttggtgggtg ttttctactt tgacttctca ttgcactaaa catacaactc
480
tccaggggtga cggggaagag gagtggggca aaggggtgtg cac
523

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<210> 3562
<211> 106
<212> PRT
<213> Homo sapiens

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<400> 3562
Met His Val Ala Thr Glu Asp Ala Arg Arg Gly Asp Ala Gly Leu Ile
1          5          10          15
Glu Asn Val Pro Glu Gly Leu Ser Ile Ser Pro Ile Asp Trp Gln Val
20          25          30
Leu His Val Asp Gly Leu Phe Arg Leu Asp Trp Leu Arg Thr Glu Glu
35          40          45
Met Glu Gly Trp Ala Gly Ser Gly Gly Val Gly Ser Gln Thr Asp Ser
50          55          60
Ala Trp Gly Leu Ala His Gly Val Glu Ala Glu Val Trp Trp Val Phe
65          70          75          80
Ser Thr Leu Thr Ser His Cys Thr Lys His Thr Thr Leu Gln Gly Asp
85          90          95
Gly Glu Glu Glu Trp Gly Lys Gly Val Cys
100          105

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<210> 3563
 <211> 359
 <212> DNA
 <213> Homo sapiens

<400> 3563
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 60
 cgaagccagg ggcgcgcggc gatgtgagcc atgagcgcca cgtggacgct gtcgccggag
 120
 cccctgccgc cgtcgacggg gccccagtg ggcgcgggcc tggacgcgga gcagcgcacg
 180
 gtgttcgcct tcgtgctctg cctgctcgtg gtgctggtgc tgttgatggt gcgctgcgtg
 240
 cgcacacctg tcgacccta cagccgcatt cccgcctcgt cctggaccga ccacaaggag
 300
 gcgctcgagc gcgggcagtt cgactacgcg ttggtgtgag gggcgcggcg cccctagg
 359

<210> 3564
 <211> 82
 <212> PRT
 <213> Homo sapiens

<400> 3564
 Met Ser Ala Thr Trp Thr Leu Ser Pro Glu Pro Leu Pro Pro Ser Thr
 1 5 10 15
 Gly Pro Pro Val Gly Ala Gly Leu Asp Ala Glu Gln Arg Thr Val Phe
 20 25 30
 Ala Phe Val Leu Cys Leu Leu Val Leu Val Leu Leu Met Val Arg
 35 40 45
 Cys Val Arg Ile Leu Leu Asp Pro Tyr Ser Arg Met Pro Ala Ser Ser
 50 55 60
 Trp Thr Asp His Lys Glu Ala Leu Glu Arg Gly Gln Phe Asp Tyr Ala
 65 70 75 80
 Leu Val

<210> 3565
 <211> 580
 <212> DNA
 <213> Homo sapiens

<400> 3565
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 cgtgagcagg cacaggagac cttccgcgcc gccggccggg cgaccccgca ggaagtagga
 120
 aggacgagcg cgcacttcaa gtcccagaag cccccgtttc ctggagcccc cgccgtgccg
 180
 cgctacgccc gccgggagcc gggcagagcg gccaagatgt cgcagcccaa gaaaagaaag
 240
 cttgagtcgg ggggcggcgc cgaaggaggg gaggggaactg aagaggaaga tggcgcgagg
 300

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<213> Homo sapiens

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 Glu Leu Pro Met Leu Thr Tyr Arg Val Asp Ala Asp Lys Gly Phe Asn
 115 120 125
 Phe Ser Val Gly Asp Asp Ala Phe Val Cys Gln Lys Lys Asn His Phe
 130 135 140
 Gln Val Thr Val Tyr Ile Gly Met Leu Gly Glu Pro Lys Tyr Val Lys
 145 150 155 160
 Thr Pro Glu Gly Leu Lys Pro Leu Asp Cys Phe Tyr Leu Lys Leu His
 165 170 175
 Gly Val Lys Leu Glu Ala Leu Asn Gln Ser Ile Asn Ile Glu Gln Ser
 180 185 190
 Gln Ser Asp Arg Ser Lys Arg Pro Phe Asn Pro Val Thr Val Asn Leu
 195 200 205
 Pro Pro Glu Gln Val Thr Lys Val Thr Val Gly Arg Leu His Phe Ser
 210 215 220
 Glu Thr Thr Ala Asn Asn Met Arg Lys Lys Gly Lys Pro Asn Pro Asp
 225 230 235 240
 Gln Arg Tyr Phe Met Leu Val Val Ala Leu Gln Ala His Ala Gln Asn
 245 250 255
 Gln Asn Tyr Thr Leu Ala Ala Gln Ile Ser Glu Arg Ile Ile Val Arg
 260 265 270
 Ala Ser Asn Pro Gly Gln Phe Glu Ser Asp Ser Asp Val Leu Trp Gln
 275 280 285
 Arg Ala Gln Val Pro Asp Thr Val Phe His His Gly Arg Val Gly Ile
 290 295 300
 Asn Thr Asp Arg Pro Asp Glu Ala Leu Val Val His Gly Asn Val Lys
 305 310 315 320
 Val Met Gly Ser Leu Met His Pro Ser Asp Leu Arg Ala Lys Glu His
 325 330 335
 Val Gln Glu Val Asp Thr Thr Glu Gln Leu Lys Arg Ile Ser Arg Met

2732

770	775	780
Asn Phe Thr Tyr His Ile Pro Val Ser Ser Gly Thr Pro Leu His Leu		
785	790	795
Ser Leu Thr Leu Gln Met Asn Ser Ser Ser Pro Val Ser Val Val Leu		800
	805	810
Cys Ser Leu Arg Ser Lys Glu Glu Pro Cys Glu Glu Gly Ser Leu Pro		815
	820	825
Gln Ser Leu His Thr His Gln Asp Thr Gln Gly Thr Ser His Arg Trp		830
	835	840
Pro Ile Thr Ile Leu Ser Phe Arg Glu Phe Thr Tyr His Phe Arg Val		845
	850	855
Ala Leu Leu Gly Gln Ala Asn Cys Ser Ser Glu Ala Leu Ala Gln Pro		860
865	870	875
Ala Thr Asp Tyr His Phe His Phe Tyr Arg Leu Cys Asp		880
	885	890

<210> 3571
 <211> 528
 <212> DNA
 <213> Homo sapiens

<400> 3571
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 420
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<210> 3572
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 3572
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 His Ala Phe Leu Phe Thr Gly Gly Val Val Ser Ala Trp Asp Gln Val
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 Ser Tyr Phe Leu Phe Val Ile Phe Thr Ala Tyr Ala Met Leu Pro Leu
 35 40 45
 Gly Met Arg Asp Ala Ala Val Ala Gly Leu Ala Ser Ser Leu Ser His

50		55		60
Leu Leu Val Leu Gly Leu Tyr Leu Gly Pro Gln Pro Asp Ser Arg Pro				
65	70	75	80	
Ala Leu Leu Pro Gln Val Ser Thr Gln Val Ala Gln Ala Ala Leu Arg				
	85	90	95	
Thr Ala Leu Pro Arg Ala Ser Arg Leu Leu Leu Gly Gly Cys				
100	105	110		

<210> 3573

<211> 1236

<212> DNA

<213> Homo sapiens

<400> 3573

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1200

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1236

<210> 3574
<211> 361
<212> PRT
<213> Homo sapiens

<400> 3574
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35 40 45
Thr Cys Val Phe Asn Lys Pro Gly Gly His Thr Ala Ser His Thr His
50 55 60
Thr Leu Thr Ala Thr Asn Pro Arg Ser His Ala His Ala Asp Ala Pro
65 70 75 80
Cys Gly Thr Cys Thr His Asn His Thr Cys Val Gln Ser Gly Arg His
85 90 95
Thr His Thr Cys Ile Glu Ala Ser Leu Trp Thr Pro Ser Ala Ser His
100 105 110
Arg Gly Gly Ser Pro Ala Val Phe Asp Trp Phe Phe Glu Ala Ala Cys
115 120 125
Pro Ala Ser Val Gln Glu Asp Pro Pro Ile Leu Arg Gln Phe Pro Pro
130 135 140
Asp Phe Arg Asp Gln Glu Ala Met Gln Met Val Pro Lys Phe Cys Phe
145 150 155 160
Pro Phe Asp Val Glu Arg Gly Pro Pro Ser Pro Ala Val Gln His Phe
165 170 175
Thr Phe Ala Leu Thr Asp Leu Ala Gly Asn Arg Arg Phe Gly Phe Cys
180 185 190
Arg Leu Arg Ala Gly Thr Gln Ser Cys Leu Cys Ile Leu Ser His Leu
195 200 205
Pro Trp Phe Glu Val Phe Tyr Lys Leu Leu Asn Thr Val Gly Asp Leu
210 215 220
Leu Ala Gln Asp Gln Val Thr Glu Ala Glu Glu Leu Leu Gln Asn Leu
225 230 235 240
Phe Gln Gln Ser Leu Ser Gly Pro Gln Ala Ser Val Gly Leu Glu Leu
245 250 255
Gly Ser Gly Val Thr Val Ser Ser Gly Gln Gly Ile Pro Pro Pro Thr
260 265 270
Arg Gly Asn Ser Lys Pro Leu Ser Cys Phe Val Ala Pro Asp Ser Gly
275 280 285
Arg Leu Pro Ser Ile Pro Glu Asn Arg Asn Leu Thr Glu Leu Val Val
290 295 300
Ala Val Thr Asp Glu Asn Ile Val Gly Leu Phe Ala Ala Leu Leu Ala
305 310 315 320
Glu Arg Arg Val Leu Leu Thr Ala Ser Lys Leu Ser Thr Leu Arg Arg
325 330 335
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355

360

<210> 3575

<211> 769

<212> DNA

<213> Homo sapiens

<400> 3575

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 480
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<210> 3576

<211> 205

<212> PRT

<213> Homo sapiens

<400> 3576

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			20					25					30		
Ser	Thr	Thr	Lys	Gln	Asp	Lys	Ile	Ile	Ser	Phe	Ile	Phe	Ala	Leu	Thr
			35				40					45			
Ile	Pro	Lys	Met	Met	Phe	Leu	Pro	Asn	Glu	Cys	Leu	His	Phe	Ile	Phe
	50					55				60					
Gln	Thr	Cys	Ser	Leu	Lys	Pro	Ile	Ile	Ala	Pro	Leu	Arg	Asn	Ile	Phe
65					70				75					80	
Thr	Ser	Ser	Ser	Gly	Met	Ser	Leu	Ser	Ala	Gly	Ser	Ser	Pro	Leu	His
				85				90					95		
Ser	Pro	Lys	Ile	Thr	Pro	His	Thr	Ser	Pro	Ala	Pro	Arg	Arg	Arg	Ser

			100					105					110				
His	Thr	Pro	Asn	Pro	Ala	Ser	Tyr	Met	Val	Pro	Ser	Ser	Ala	Ser	Thr		
		115						120					125				
Ser	Val	Asn	Asn	Pro	Val	Ser	Gln	Thr	Pro	Ser	Ser	Gly	Gln	Val	Ile		
		130					135					140					
Gln	Lys	Glu	Thr	Val	Gly	Gly	Thr	Thr	Tyr	Phe	Tyr	Thr	Asp	Thr	Thr		
145					150					155					160		
Pro	Ala	Pro	Leu	Thr	Gly	Met	Val	Phe	Pro	Asn	Tyr	His	Ile	Tyr	Pro		
			165					170					175				
Pro	Thr	Ala	Pro	His	Val	Ala	Tyr	Met	Gln	Pro	Lys	Ala	Asn	Ala	Pro		
		180						185					190				
Ser	Phe	Phe	Met	Ala	Asp	Glu	Leu	Arg	Gln	Glu	Leu	Ile					
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<210> 3577

<211> 1225

<212> DNA

<213> Homo sapiens

<400> 3577

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180
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300
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420
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480
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780
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1020

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<210> 3578
 <211> 195
 <212> PRT
 <213> Homo sapiens

<400> 3578
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 Ile Ser Glu His Phe His Pro Thr Val Ile Gly Glu Ser Met Tyr Gly
 35 40 45
 Asp Phe Glu Glu Ala Phe Asp His Leu Gln Asn Arg Leu Ile Ala Thr
 50 55 60
 Lys Asn Pro Glu Glu Ile Arg Gly Gly Gly Leu Leu Lys Tyr Ser Asn
 65 70 75 80
 Leu Leu Val Arg Asp Phe Arg Pro Thr Asp Gln Glu Glu Ile Lys Thr
 85 90 95
 Leu Glu Arg Tyr Met Cys Ser Arg Phe Phe Ile Asp Phe Pro Asp Ile
 100 105 110
 Leu Glu Gln Gln Arg Lys Leu Glu Thr Tyr Leu Gln Asn His Phe Ala
 115 120 125
 Glu Glu Glu Arg Ser Lys Tyr Asp Tyr Leu Met Ile Leu Arg Arg Val
 130 135 140
 Val Asn Glu Ser Thr Val Cys Leu Met Gly His Glu Arg Arg Gln Thr
 145 150 155 160
 Leu Asn Leu Ile Ser Leu Leu Ala Leu Arg Val Leu Gly Gly Thr Lys
 165 170 175
 His His Pro Pro Val Pro Pro Arg Ser Pro Val Thr Thr Ser Gly Pro
 180 185 190
 Leu Ser Gln
 195

<210> 3579
 <211> 755
 <212> DNA
 <213> Homo sapiens

<400> 3579
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 180

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 420
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<210> 3580

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3580

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			20					25					30		
Glu	Thr	Lys	Gln	His	Glu	Lys	Trp	Leu	Ser	Gln	Pro	Thr	Cys	Ser	Asp
		35					40					45			
Met	Pro	Arg	Asn	Phe	Ser	Ser	Gly	Pro	Gly	Ser	Gly	Gly	Leu	Leu	Ile
	50					55					60				
Phe	Ser	Gln	Asp	Ile	Val	Leu	Ser	Trp	Asn	Leu	Ala	Gly	Gly	Trp	Ser
65				70					75					80	
Ile	Cys	Ile	Trp	Ser	Ile	Ala	Arg	Leu	Ser	His	Leu	Ser	Ser	Asp	Gln
			85					90						95	
Lys	Cys	Ile	Ser	Lys	Ile	Ile	Thr	Ser	Thr	Lys	Thr	Ile	Ile	Asp	Cys
			100				105						110		
Glu	Gln	Thr	Phe	Ser	Val	Thr	Ser	Arg							
		115					120								

<210> 3581

<211> 2132

<212> DNA

<213> Homo sapiens

<400> 3581

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<210> 3582

<211> 138

<212> PRT

<213> Homo sapiens

<400> 3582

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			20					25					30		
Ala	Ala	Pro	Gly	Val	Ala	Pro	Arg	Gly	Ala	Cys	Trp	Thr	Cys	Thr	Arg
		35					40					45			
Arg	Ala	Ser	Ser	Ala	Cys	Thr	Arg	Arg	Gly	Thr	Ala	Ala	Ala	Trp	Ser
		50				55					60				
Ser	Arg	Pro	Arg	Pro	Ser	Thr	Thr	Ala	Thr	Ser	Arg	Cys	Ser	Ser	Ala
65					70				75					80	
Arg	Trp	Arg	Arg	Arg	Thr	Arg	Gly	Cys	Thr	Pro	Ala	Thr	Cys	Thr	Ile
				85				90					95		
Thr	Thr	Ala	Thr	Ser	Thr	Arg	Ala	Trp	Pro	Ser	Ala	Trp	Arg	Ser	Pro
			100					105					110		
Thr	Ala	Pro	Arg	Pro	Pro	Pro	Pro	Thr	Gly	Thr	Ala	Arg	Arg	Arg	Cys
		115					120					125			
Trp	Arg	Trp	Arg	Ala	Ala	His	Pro	Arg	Phe						
		130				135									

<210> 3583

<211> 1554

<212> DNA

<213> Homo sapiens

<400> 3583

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<211> 356

<212> PRT

<213> Homo sapiens

<400> 3584

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<212> PRT

<213> Homo sapiens

<400> 3586

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<211> 499

<212> PRT

<213> Homo sapiens

<400> 3588

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<210> 3589

<211> 675

<212> DNA

<213> Homo sapiens

<400> 3589

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<210> 3590

<211> 117

<212> PRT

<213> Homo sapiens

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Pro	Gly	Pro	Cys	Phe	Val	Ser	Glu	Leu	Gly	Gly	Pro	Ile	Pro	Lys	His
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Trp	Leu	Gly	Asn	Ser	Tyr	Pro	Ile	Cys	Cys	Leu	Gly	Ser	Ala	Trp	Phe
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<210> 3591

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<212> DNA

<213> Homo sapiens

<400> 3591

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<400> 3592

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Asp	Ser	Met	Glu	Leu	Glu	Arg	Gln	Arg	Gly	Ile	Thr	Ile	Gln	Ser	Ala
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Leu	Asp	Gly	Ala	Val	Leu	Val	Leu	Cys	Ala	Val	Gly	Gly	Val	Gln	Cys
145					150					155				160	
Gln	Thr	Met	Thr	Val	Asn	Arg	Gln	Met	Lys	Arg	Tyr	Asn	Val	Pro	Phe
				165				170						175	
Leu	Thr	Phe	Ile	Asn	Lys	Leu	Asp	Arg	Met	Gly	Ser	Asn	Pro	Ala	Arg
		180					185						190		
Ala	Leu	Gln	Met	Arg	Ser	Lys	Leu	Asn	His	Asn	Ala	Ala	Phe	Met	
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Gln	Ile	Pro	Met	Gly	Leu	Glu	Gly	Asn	Phe	Lys	Gly	Ile	Val	Asp	
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<210> 3593
 <211> 1005
 <212> DNA
 <213> Homo sapiens

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 240
 gagatagaga gaagcctgta ttcagaccac gagcttcgtg ctctggatga aaaccagcga
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 420
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 480
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 1005

<210> 3594
 <211> 282
 <212> PRT
 <213> Homo sapiens

<400> 3594
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 20 25 30
 Arg Ser Leu Ala Leu Ala Ala Ala Pro Ser Ser Asn Gly Ser Pro Trp
 35 40 45
 Arg Leu Leu Gly Ala Leu Cys Leu Gln Arg Pro Pro Val Val Ser Lys

50	55	60
Pro Leu Thr Pro Leu Gln Glu Glu Met Ala Ser Leu Leu Gln Gln Ile		
65	70	75
Glu Ile Glu Arg Ser Leu Tyr Ser Asp His Glu Leu Arg Ala Leu Asp		80
	85	90
Glu Asn Gln Arg Leu Ala Lys Lys Lys Ala Asp Leu His Asp Glu Glu		95
	100	105
Asp Glu Gln Asp Ile Leu Leu Ala Gln Asp Leu Glu Asp Met Trp Glu		110
	115	120
Gln Lys Phe Leu Gln Phe Lys Leu Gly Ala Arg Ile Thr Glu Ala Asp		125
	130	135
Glu Lys Asn Asp Arg Thr Ser Leu Asn Arg Lys Leu Asp Arg Asn Leu		140
	145	150
Val Leu Leu Val Arg Glu Lys Phe Gly Asp Gln Asp Val Trp Ile Leu		155
	160	165
Pro Gln Ala Glu Trp Gln Pro Gly Glu Thr Leu Arg Gly Thr Ala Glu		170
	175	180
Arg Thr Leu Ala Thr Leu Ser Glu Asn Asn Met Glu Ala Lys Phe Leu		185
	190	195
Gly Asn Ala Pro Cys Gly His Tyr Thr Phe Lys Phe Pro Gln Ala Met		200
	205	210
Arg Thr Glu Ser Asn Leu Gly Ala Lys Val Phe Phe Phe Lys Ala Leu		215
	220	225
Leu Leu Thr Gly Asp Phe Ser Gln Ala Gly Asn Lys Gly His His Val		230
	235	240
Trp Val Thr Lys Asp Glu Leu Gly Asp Tyr Leu Lys Pro Lys Tyr Leu		245
	250	255
Ala Gln Val Arg Arg Phe Val Ser Asp Leu		260
	265	270
	275	280

<210> 3595

<211> 1903

<212> DNA

<213> Homo sapiens

<400> 3595

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420
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480
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540

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720
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1903

<210> 3596

<211> 496

<212> PRT

<213> Homo sapiens

<400> 3596

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Gln Met Leu Ala Gln Tyr Ile Glu Ser Phe Thr Gln Gly Ser Ile Glu			
	35	40	45
Ala His Lys Arg Gly Ser Arg Phe Trp Ile Gln Asp Lys Gly Pro Ile			
	50	55	60
Val Glu Ser Tyr Ile Gly Phe Ile Glu Ser Tyr Arg Asp Pro Phe Gly			
65	70	75	80
Ser Arg Gly Glu Phe Glu Gly Phe Val Ala Val Val Asn Lys Ala Met			
	85	90	95
Ser Ala Lys Phe Glu Arg Leu Val Ala Ser Ala Glu Gln Leu Leu Lys			
	100	105	110
Glu Leu Pro Trp Pro Pro Thr Phe Glu Lys Asp Lys Phe Leu Thr Pro			
	115	120	125
Asp Phe Thr Ser Leu Asp Val Leu Thr Phe Ala Gly Ser Gly Ile Pro			
	130	135	140
Ala Gly Ile Asn Ile Pro Asn Tyr Asp Asp Leu Arg Gln Thr Glu Gly			
145	150	155	160
Phe Lys Asn Val Ser Leu Gly Asn Val Leu Ala Val Ala Tyr Ala Thr			
	165	170	175
Gln Arg Glu Lys Leu Thr Phe Leu Glu Glu Asp Asp Lys Asp Leu Tyr			
	180	185	190
Ile Leu Trp Lys Gly Pro Ser Phe Asp Val Gln Val Gly Leu His Glu			
	195	200	205
Leu Leu Gly His Gly Ser Gly Lys Leu Phe Val Gln Asp Glu Lys Gly			
	210	215	220
Ala Phe Asn Phe Asp Gln Glu Thr Val Ile Asn Pro Glu Thr Gly Glu			
225	230	235	240
Gln Ile Gln Ser Trp Tyr Arg Ser Gly Glu Thr Trp Asp Ser Lys Phe			
	245	250	255
Ser Thr Ile Ala Ser Ser Tyr Glu Glu Cys Arg Ala Glu Ser Val Gly			
	260	265	270
Leu Tyr Leu Cys Leu His Pro Gln Val Leu Glu Ile Phe Gly Phe Glu			
	275	280	285
Gly Ala Asp Ala Glu Asp Val Ile Tyr Val Asn Trp Leu Asn Met Val			
	290	295	300
Arg Ala Gly Leu Leu Ala Leu Glu Phe Tyr Thr Pro Glu Ala Phe Asn			
305	310	315	320
Trp Arg Gln Ala His Met Gln Ala Arg Phe Val Ile Leu Arg Val Leu			
	325	330	335
Leu Glu Ala Gly Glu Gly Leu Val Thr Ile Thr Pro Thr Thr Gly Ser			
	340	345	350
Asp Gly Arg Pro Asp Ala Arg Val Arg Leu Asp Arg Ser Lys Ile Arg			
	355	360	365
Ser Val Gly Lys Pro Ala Leu Glu Arg Phe Leu Arg Arg Leu Gln Val			
	370	375	380
Leu Lys Ser Thr Gly Asp Val Ala Gly Gly Arg Ala Leu Tyr Glu Gly			
385	390	395	400
Tyr Ala Thr Val Thr Asp Ala Pro Pro Glu Cys Phe Leu Thr Leu Arg			
	405	410	415
Asp Thr Val Leu Leu Arg Lys Glu Ser Arg Lys Leu Ile Val Gln Pro			
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Asn Thr Arg Leu Glu Gly Asn Gly Ser Asp Val Gln Leu Leu Glu Tyr			

<210> 3598

<211> 159
 <212> PRT
 <213> Homo sapiens

<400> 3598

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Arg Ser Leu Thr Ser Cys Ser Ser Asp Ile Thr Leu Arg Gly Gly Arg
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 20           25           30
Asp Tyr Asn Lys Asp Asp Met Ser Tyr Arg Arg Ile Ser Ala Val Glu
 35           40           45
Pro Lys Thr Ala Leu Pro Phe Asn Arg Phe Leu Pro Asn Lys Ser Arg
 50           55           60
Gln Pro Ser Tyr Val Pro Ala Pro Leu Arg Lys Lys Lys Pro Asp Lys
 65           70           75           80
His Glu Asp Asn Arg Arg Ser Trp Ala Ser Pro Val Tyr Thr Glu Ala
 85           90           95
Asp Gly Thr Phe Ser Arg Ser Lys Ser Met Ser Asp Val Ser Ala Glu
100          105          110
Asp Val Gln Asn Leu Arg Gln Leu Arg Tyr Glu Glu Met Gln Lys Ile
115          120          125
Lys Ser Gln Leu Lys Glu Gln Asp Gln Lys Trp Gln Asp Asp Leu Ala
130          135          140
Lys Trp Lys Asp Arg Arg Lys Ser Tyr Thr Ser Asp Leu Gln Lys
145          150          155

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<210> 3599
 <211> 691
 <212> DNA
 <213> Homo sapiens

<400> 3599

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240
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660

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691

<210> 3600
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<212> PRT
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Met Val Glu Val Arg Ser Trp Ser Gly Ser Leu Val Gly Trp Leu Ala
35 40 45
Pro Arg Pro Leu Ser Val Pro Ile Glu His Leu Leu Gly Ala Lys Asn
50 55 60
Cys Cys Arg His Gly Gly Gln Trp Val Arg Arg Ala Val Pro Ala Val
65 70 75 80
Leu Ser Leu Val Gly Ala Ser Ser Leu His His Ala Val Tyr Leu Phe
85 90 95
Leu Leu

<210> 3601
<211> 2963
<212> DNA
<213> Homo sapiens

<400> 3601
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180
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<210> 3602
<211> 299
<212> PRT
<213> Homo sapiens
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			20					25					30		
Glu	Ala	Arg	Glu	Leu	Met	Tyr	Ser	Gly	Ala	Leu	Leu	Phe	Phe	Ser	His
			35				40					45			
Gly	Gln	Gln	Asn	Ser	Ala	Ala	Asp	Leu	Ser	Met	Leu	Val	Leu	Glu	Ser
	50					55					60				
Leu	Glu	Lys	Ala	Glu	Val	Glu	Val	Ala	Asp	Glu	Leu	Leu	Glu	Asn	Leu
65					70					75					80
Ala	Lys	Val	Phe	Ser	Leu	Met	Asp	Pro	Asn	Ser	Pro	Glu	Arg	Val	Thr
				85					90					95	
Phe	Val	Ser	Arg	Ala	Leu	Lys	Trp	Ser	Ser	Gly	Gly	Ser	Gly	Lys	Leu
			100					105					110		
Gly	His	Pro	Arg	Leu	His	Gln	Leu	Leu	Ala	Leu	Thr	Leu	Trp	Lys	Glu
			115				120					125			
Gln	Asn	Tyr	Cys	Glu	Ser	Arg	Tyr	His	Phe	Leu	His	Ser	Ala	Asp	Gly
	130					135					140				
Glu	Gly	Cys	Ala	Asn	Met	Leu	Val	Glu	Tyr	Ser	Thr	Ser	Arg	Gly	Phe
145					150					155					160
Arg	Ser	Glu	Val	Asp	Met	Phe	Val	Ala	Gln	Ala	Val	Leu	Gln	Phe	Leu
				165					170					175	
Cys	Leu	Lys	Asn	Lys	Ser	Ser	Ala	Ser	Val	Val	Phe	Thr	Thr	Tyr	Thr
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Gln	Lys	His	Pro	Ser	Ile	Glu	Asp	Gly	Pro	Pro	Phe	Val	Glu	Pro	Leu

<400>	3603				
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960					
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1020					

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 1080
 tt
 1082

<210> 3604
 <211> 146
 <212> PRT
 <213> Homo sapiens

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 Val Ala Ala Gln Glu Glu Pro Asp Lys Glu Gly Lys Glu Lys Pro His
 35 40 45
 Ala Gly Val Ser Pro Arg Gly Val Lys Arg Gln Arg Arg Ser Ser Ser
 50 55 60
 Gly Gly Ser Gln Glu Lys Arg Gly Arg Pro Ser Gln Glu Pro Pro Leu
 65 70 75 80
 Ala Pro Pro His Arg Arg Arg Arg Ser Arg Gln His Pro Gly Pro Leu
 85 90 95
 Pro Pro Thr Asn Ala Ala Pro Thr Val Pro Gly Pro Val Glu Pro Leu
 100 105 110
 Leu Leu Pro Pro Pro Pro Pro Ser Leu Ala Pro Ala Gly Pro Ala
 115 120 125
 Val Ala Ala Pro Leu Pro Ala Pro Ser Thr Arg Pro Ser Ser Pro Ser
 130 135 140
 Arg Leu
 145

<210> 3605
 <211> 2004
 <212> DNA
 <213> Homo sapiens

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<210> 3606

<211> 324
 <212> PRT
 <213> Homo sapiens

<400> 3606

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			100					105					110		
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		180						185					190		
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		195					200					205			
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 <211> 1726
 <212> DNA
 <213> Homo sapiens

<400> 3607

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<210> 3608

<211> 436

<212> PRT

<213> Homo sapiens

<400> 3608

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			20					25					30		
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		35					40					45			
Tyr	Glu	Gly	Lys	Gly	Gly	Met	Cys	Ser	Ile	Arg	Leu	Ser	Glu	Pro	Leu
	50					55					60				
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65					70					75				80	
Met	Ile	His	Ala	Tyr	Leu	Phe	Val	Thr	Asn	Asn	Asp	Lys	Asp	Arg	Glu
			85						90					95	
Gly	His	Gly	Pro	Glu	Phe	Cys	Lys	His	Met	His	Arg	Ile	Asn	Ser	Leu
			100					105					110		
Thr	Gly	Ala	Asn	Ile	Thr	Val	Tyr	His	Thr	Phe	His	Asp	Glu	Val	Asp
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	195						200					205			
Lys	Pro	Asn	Arg	Gly	Glu	Ala	Gln	Leu	Val	Ile	Pro	Phe	Ser	Gly	Lys
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Phe	Ala	Asn	Gln	Lys	Ala	Phe	Arg	Gly	Val	Asn	Gly	Ser	Pro	Arg	Ile
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			325						330					335	
Gln	Arg	Arg	Val	Ser	Ser	Ser	Lys	Ile	Ser	Leu	Arg	Asn	Ser	Ser	Lys

			340					345					350				
Val	Thr	Glu	Ser	Ala	Ser	Val	Met	Pro	Ser	Gln	Asp	Val	Ser	Gly	Ser		
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Glu	Asp	Thr	Phe	Pro	Asn	Lys	Arg	Pro	Arg	Leu	Glu	Asp	Lys	Thr	Val		
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			405					410					415				
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<210> 3609

<211> 1286

<212> DNA

<213> Homo sapiens

<400> 3609

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<210> 3610

<211> 268

<212> PRT

<213> Homo sapiens

<400> 3610

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		20						25					30		
Glu	Pro	Gln	Asp	Leu	Glu	Ser	Thr	Asn	Leu	Leu	Glu	Ser	Glu	Ala	Pro
		35					40					45			
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Thr	Ala	Asp	Lys	Phe	Leu	Gln	Leu	Xaa	Trp	Asn	Gln	Arg	Cys	Gln	Glu
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			85						90					95	
His	Cys	Glu	Gln	Val	Leu	Gly	Glu	Gly	Ala	Leu	Asp	Arg	Gly	Thr	Tyr
			100					105					110		
Tyr	Trp	Glu	Val	Glu	Ile	Ile	Glu	Gly	Trp	Val	Ser	Met	Gly	Val	Met
		115					120					125			
Ala	Ala	Asp	Phe	Ser	Pro	Gln	Glu	Pro	Tyr	Asp	Arg	Gly	Arg	Leu	Gly
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Val	Trp	Phe	His	Gly	Leu	Glu	Ala	Pro	Leu	Pro	His	Pro	Phe	Ser	Pro
			165						170					175	
Thr	Val	Gly	Val	Cys	Leu	Glu	Tyr	Ala	Asp	Arg	Ala	Leu	Ala	Phe	Tyr
		180						185					190		
Ala	Val	Arg	Asp	Gly	Lys	Met	Ser	Leu	Leu	Arg	Arg	Leu	Lys	Ala	Ser
	195						200					205			
Arg	Pro	Arg	Arg	Gly	Gly	Ile	Pro	Ala	Ser	Pro	Ile	Asp	Pro	Phe	Gln
	210				215						220				
Ser	Arg	Leu	Asp	Ser	His	Phe	Ala	Gly	Leu	Phe	Thr	His	Arg	Leu	Lys
225					230					235				240	
Pro	Ala	Phe	Phe	Leu	Glu	Ser	Val	Asp	Ala	His	Leu	Gln	Ile	Gly	Pro
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<211> 816

<212> DNA

<213> Homo sapiens

<400> 3611

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<212> PRT

<213> Homo sapiens

<400> 3612

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			20					25					30		
Lys	Val	Lys	Pro	Arg	Lys	Ile	Phe	Gln	Trp	Arg	Gln	Leu	Glu	Asn	Leu
			35				40					45			
Tyr	Phe	Arg	Glu	Lys	Lys	Phe	Ser	Val	Glu	Val	His	Asp	Pro	Arg	Arg
			50			55					60				
Ala	Ser	Val	Thr	Arg	Arg	Thr	Phe	Gly	His	Ser	Gly	Ile	Ala	Val	His
65					70				75					80	
Thr	Trp	Tyr	Ala	Cys	Pro	Ala	Leu	Ile	Lys	Ser	Ile	Trp	Ala	Met	Ala
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Ile	Ser	Gln	His	Gln	Phe	Tyr	Leu	Asp	Arg	Lys	Gln	Ser	Lys	Ser	Lys
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<212> DNA
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<210> 3614
<211> 123
<212> PRT
<213> Homo sapiens
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<400> 3614

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Gly Leu Gly Ile Ser Leu Asn Ser Lys Arg Arg Lys Glu Glu Thr Phe
          35           40           45
Pro Thr Arg Cys Gly Cys Asp Ala Ser Gln Gly Pro Gln Gly His Cys
          50           55           60
Pro Arg Ala His Arg Pro Pro Leu Thr Ala Thr Gly Ala Trp Ile Arg
          65           70           75           80
Ser Tyr Ile Val Gln Ser Phe Arg Pro Leu Pro Trp Ser Thr Arg Thr
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Gln Thr Arg Ser Glu Lys Ser Pro Pro Pro
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<210> 3615

<211> 1388

<212> DNA

<213> Homo sapiens

<400> 3615

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<211> 290

<212> PRT

<213> Homo sapiens

<400> 3616

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			20				25					30			
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Ala	Arg	Leu	Leu	Trp	Cys	Cys	Trp	Ala	Leu	Pro	Leu	His	Leu	Ala
			260					265					270	
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<210> 3617

<211> 804

<212> DNA

<213> Homo sapiens

<400> 3617

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<210> 3618

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3618

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<212> DNA
<213> Homo sapiens
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<210> 3620
<211> 159
<212> PRT
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35 40 45
Pro Gly Ala Ser Ser Gln Pro Cys Ser Thr Tyr Pro Pro Trp Arg Thr
50 55 60
Thr Thr Leu Ser Thr Ser Thr Ser Trp Ser Cys Leu Leu Leu Pro Cys
65 70 75 80
Ala Ser Cys Pro Ser Arg Cys Ser Cys Gln Thr Trp Pro Ser Ser Pro
85 90 95
Thr Ala Ser Thr Pro Thr Thr Ser Cys Thr Ser Phe Met Thr Thr Cys
100 105 110
Cys His Ser Ser Thr Pro Cys Gly Ser Phe Pro Ala Trp Pro Thr Arg
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<210> 3621
<211> 2934
<212> DNA
<213> Homo sapiens

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<211> 228

<212> PRT

<213> Homo sapiens

<400> 3622

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			20					25					30		
Glu	Ser	Gly	Phe	Asp	Pro	Asn	Ile	Arg	Asp	Ser	Arg	Gly	Arg	Thr	Gly
		35					40					45			
Leu	His	Leu	Ala	Ala	Ala	Arg	Gly	Asn	Val	Asp	Ile	Cys	Gln	Leu	Leu
		50				55					60				
His	Lys	Phe	Gly	Ala	Asp	Leu	Leu	Ala	Thr	Asp	Tyr	Gln	Gly	Asn	Thr
65					70					75				80	
Ala	Leu	His	Leu	Cys	Gly	His	Val	Asp	Thr	Ile	Gln	Phe	Leu	Val	Ser
				85					90					95	
Asn	Gly	Leu	Lys	Ile	Asp	Ile	Cys	Asn	His	Gln	Gly	Ala	Thr	Pro	Leu
			100					105					110		
Val	Leu	Ala	Lys	Arg	Arg	Gly	Val	Asn	Lys	Asp	Val	Ile	Arg	Leu	Leu
		115					120					125			
Glu	Ser	Leu	Glu	Glu	Gln	Glu	Val	Lys	Gly	Phe	Asn	Arg	Gly	Thr	His
		130				135					140				
Ser	Lys	Leu	Glu	Thr	Met	Gln	Thr	Ala	Glu	Ser	Glu	Ser	Ala	Met	Glu
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Ser	His	Ser	Leu	Leu	Asn	Pro	Asn	Leu	Gln	Gln	Gly	Glu	Gly	Val	Leu

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<210> 3623

<211> 586

<212> DNA

<213> Homo sapiens

<400> 3623

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<210> 3624

<211> 159

<212> PRT

<213> Homo sapiens

<400> 3624

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 35 40 45
 Glu Lys Lys Arg Met Asp Lys Ala Ile Gly Tyr Ser Phe Ala Ile Val
 50 55 60
 Gly Ile Asn Ile Thr Asp Leu Ala Tyr Asn Leu Leu Val Ser Gly Ala
 65 70 75 80
 Leu Lys Thr His Phe Tyr Asn Ile Ala Pro Glu Ala Pro Thr Leu Ser

				85					90					95					
His	Phe	Gln	Gln	Thr	Phe	Cys	Tyr	Leu	Met	His	Glu	Phe	His	Lys	Phe				
			100						105					110					
Trp	Ile	Glu	Glu	Asp	Pro	Met	Asp	Ile	Met	Glu	Phe	Asn	Arg	Val	Arg				
		115					120						125						
Glu	Lys	Phe	Arg	Lys	Arg	Ile	Ile	Lys	Gln	Leu	Gln	Asn	Pro	Asp	Met				
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Ala	Leu	Cys	Pro	His	Phe	Ala	Ala	Ser	Glu	Gly	Leu	Ile	Asn	Met					
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<210> 3625

<211> 4799

<212> DNA

<213> Homo sapiens

<400> 3625

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<210> 3626

<211> 551

<212> PRT

<213> Homo sapiens

<400> 3626

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Trp	Gly	Pro	Ser	Ser	Ser	Leu	Met	Ser	Glu	Ile	Ala	Asp	Leu	Thr	Tyr
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	65				70					75					80
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Lys	Glu	Asn	Met	Tyr	Ala	Val	Gln	Thr	Leu	Lys	Asp	Phe	Gln	Tyr	Val
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Asp	Arg	Asp	Gly	Lys	Asp	Gln	Gly	Val	Asn	Val	Arg	Glu	Lys	Ala	Lys
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Gln	Leu	Val	Ala	Leu	Leu	Arg	Asp	Glu	Asp	Arg	Leu	Arg	Glu	Glu	Arg
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Ala	His	Ala	Leu	Lys	Thr	Lys	Glu	Lys	Leu	Ala	Gln	Thr	Ala	Thr	Ala
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Ser	Ser	Ala	Ala	Val	Gly	Ser	Gly	Pro	Pro	Pro	Glu	Ala	Glu	Gln	Ala
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Trp	Pro	Gln	Ser	Ser	Gly	Glu	Glu	Glu	Leu	Gln	Leu	Gln	Leu	Ala	Leu
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Ala	Met	Ser	Lys	Glu	Glu	Ala	Asp	Gln	Glu	Glu	Arg	Ile	Arg	Arg	Gly
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Gly	Gly	Lys	Glu	Glu	Ser	Ser	Leu	Met	Asp	Leu	Ala	Asp	Val	Phe	Thr
	225					230				235					240
Ala	Pro	Ala	Pro	Ala	Pro	Thr	Thr	Asp	Pro	Trp	Gly	Gly	Pro	Ala	Pro
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Ser Val Asp Pro Trp Gly Gly Thr Pro Ala Pro Ala Ala Gly Glu Gly
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Pro Thr Pro Asp Pro Trp Gly Ser Ser Asp Gly Gly Val Pro Val Ser
      325                330                335
Gly Pro Ser Ala Ser Asp Pro Trp Thr Pro Ala Pro Ala Phe Ser Asp
      340                345                350
Pro Trp Gly Gly Ser Pro Ala Lys Pro Ser Thr Asn Gly Thr Thr Thr
      355                360                365
Ala Gly Gly Phe Asp Thr Glu Pro Asp Glu Phe Ser Asp Phe Asp Arg
      370                375                380
Leu Arg Thr Ala Leu Pro Thr Ser Gly Ser Ser Ala Gly Glu Leu Glu
      385                390                395                400
Leu Leu Ala Gly Glu Val Pro Ala Arg Ser Pro Gly Ala Phe Asp Met
      405                410                415
Ser Gly Val Arg Gly Ser Leu Ala Glu Ala Val Gly Ser Pro Pro Pro
      420                425                430
Ala Ala Thr Pro Thr Pro Thr Pro Pro Thr Arg Lys Thr Pro Glu Ser
      435                440                445
Phe Leu Gly Pro Asn Ala Ala Leu Val Asp Leu Asp Ser Leu Val Ser
      450                455                460
Arg Pro Gly Pro Thr Pro Pro Gly Ala Lys Ala Ser Asn Pro Phe Leu
      465                470                475                480
Pro Gly Gly Gly Pro Ala Thr Gly Pro Ser Val Thr Asn Pro Phe Gln
      485                490                495
Pro Ala Pro Pro Ala Thr Leu Thr Leu Asn Gln Leu Arg Leu Ser Pro
      500                505                510
Val Pro Pro Val Pro Gly Ala Pro Pro Thr Tyr Ile Ser Pro Leu Gly
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Asn Thr Asn Pro Phe Leu Leu
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<210> 3627

<211> 1760

<212> DNA

<213> Homo sapiens

<400> 3627

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180
gatatggaag aatttcattg caggactttg cagcatgacg acagctgtca ggtgattcca
240
gttcttccac aagtgatgat gatcctgatt cccggacaga cattacctct tcagcttttt
300

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cacctcaag aagtcagtat ggtgcggaat ttaattcaga aagatagaac ctttgctggt
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420
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480
caaaggttca aagtccttga gctaagaaca cagtcagatg gaatccagca agctaaagtg
540
caaattcttc ccgaatgtgt gttgccttca accatgtctg cagttcaatt agaatccctc
600
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660
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720
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780
gaatgggatg aaaatctaaa agatgattct ctcccttcaa atccaataga tttttcttac
840
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<210> 3628

<211> 440

<212> PRT

<213> Homo sapiens

<400> 3628

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 35 40 45
 Thr Ser Leu Pro Thr Ser His Thr Tyr Leu Gly Ala Asp Met Glu Glu
 50 55 60
 Phe His Gly Arg Thr Leu His Asp Asp Asp Ser Cys Gln Val Ile Pro
 65 70 75 80
 Val Leu Pro Gln Val Met Met Ile Leu Ile Pro Gly Gln Thr Leu Pro
 85 90 95
 Leu Gln Leu Phe His Pro Gln Glu Val Ser Met Val Arg Asn Leu Ile
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 Gln Lys Asp Arg Thr Phe Ala Val Leu Ala Tyr Ser Asn Val Gln Glu
 115 120 125
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 Glu Gln Asp Phe Gly Ile Glu Ile Val Lys Val Lys Ala Ile Gly Arg
 145 150 155 160
 Gln Arg Phe Lys Val Leu Glu Leu Arg Thr Gln Ser Asp Gly Ile Gln
 165 170 175
 Gln Ala Lys Val Gln Ile Leu Pro Glu Cys Val Leu Pro Ser Thr Met
 180 185 190
 Ser Ala Val Gln Leu Glu Ser Leu Asn Lys Cys Gln Ile Phe Pro Ser
 195 200 205
 Lys Pro Val Ser Arg Glu Asp Gln Cys Ser Tyr Lys Trp Trp Gln Lys
 210 215 220
 Tyr Gln Lys Arg Lys Phe His Cys Ala Asn Leu Thr Ser Trp Pro Arg
 225 230 235 240
 Trp Leu Tyr Ser Leu Tyr Asp Ala Glu Thr Leu Met Asp Arg Ile Lys
 245 250 255
 Lys Gln Leu Arg Glu Trp Asp Glu Asn Leu Lys Asp Asp Ser Leu Pro
 260 265 270
 Ser Asn Pro Ile Asp Phe Ser Tyr Arg Val Ala Ala Cys Leu Pro Ile
 275 280 285
 Asp Asp Val Leu Arg Ile Gln Leu Leu Lys Ile Gly Ser Ala Ile Gln
 290 295 300
 Arg Leu Arg Cys Glu Leu Asp Ile Met Asn Lys Cys Thr Ser Leu Cys
 305 310 315 320
 Cys Lys Gln Cys Gln Glu Thr Glu Ile Thr Thr Lys Asn Glu Ile Phe
 325 330 335
 Ser Leu Ser Leu Cys Gly Pro Met Ala Ala Tyr Val Asn Pro His Gly
 340 345 350
 Tyr Val His Glu Thr Leu Thr Val Tyr Lys Ala Cys Asn Leu Asn Leu
 355 360 365
 Ile Gly Arg Pro Ser Thr Glu His Ser Trp Phe Pro Gly Tyr Ala Trp
 370 375 380
 Thr Val Ala Gln Cys Lys Ile Cys Ala Ser His Ile Gly Trp Lys Phe
 385 390 395 400
 Thr Ala Thr Lys Lys Asp Met Ser Pro Gln Lys Phe Trp Gly Leu Thr

	405		410		415
Arg Ser Ala Leu Leu Pro Thr Ile Pro Asp Thr Glu Asp Glu Ile Ser					
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Pro Asp Lys Val Ile Leu Cys Leu					
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<210> 3629
 <211> 695
 <212> DNA
 <213> Homo sapiens

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<210> 3630
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 3630
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 Ser Tyr Phe Leu Phe Val Ile Phe Thr Ala Tyr Ala Met Leu Pro Leu
 35 40 45
 Gly Met Arg Asp Ala Ala Val Ala Gly Leu Ala Ser Ser Leu Ser His
 50 55 60
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<210> 3633
<211> 1570
<212> DNA
<213> Homo sapiens
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660
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<210> 3634

<211> 277

<212> PRT

<213> Homo sapiens

<400> 3634

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		20						25					30		
Glu	Ile	Val	Tyr	Ser	Gly	Gly	Asp	Asp	Gly	Leu	Leu	Arg	Gly	Trp	Asp
		35					40					45			
Thr	Arg	Val	Pro	Gly	Lys	Phe	Leu	Phe	Thr	Ser	Xaa	Lys	Thr	His	His
		50				55					60				
Xaa	Gly	Val	Cys	Ser	Ile	Gln	Ser	Ser	Pro	His	Arg	Glu	His	Ile	Leu
65					70				75					80	
Ala	Thr	Gly	Ser	Tyr	Asp	Glu	His	Ile	Leu	Leu	Trp	Asp	Thr	Arg	Asn
			85					90					95		
Met	Lys	Gln	Pro	Leu	Ala	Asp	Thr	Pro	Val	Gln	Gly	Gly	Val	Trp	Arg
			100					105					110		
Ile	Lys	Trp	His	Pro	Phe	His	His	His	Leu	Leu	Leu	Ala	Ala	Cys	Met

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<210> 3635
<211> 835
<212> DNA
<213> Homo sapiens
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180
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420
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660
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720
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780

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<210> 3636
<211> 278
<212> PRT
<213> Homo sapiens

<400> 3636
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Ala Arg Leu Gln Gln Val Asp Pro Val Leu Leu Lys Asp Glu Pro Gln
35 40 45
Gln Thr Ala Ala Gln Met Gly Cys Ala Pro Ile Gln Pro Leu Ala Met
50 55 60
Pro Gln Ala Leu Pro Leu Ala Ala Gly Pro Leu Pro Pro Gly Ser Ile
65 70 75 80
Ala Asn Leu Thr Glu Leu Gln Gly Val Ile Val Gly Gln Pro Val Leu
85 90 95
Gly Gln Ala Gln Leu Ala Gly Leu Gly Gln Gly Ile Leu Thr Glu Thr
100 105 110
Gln Gln Gly Leu Met Val Ala Ser Pro Ala Gln Thr Leu Asn Asp Thr
115 120 125
Leu Asp Asp Ile Met Ala Ala Val Ser Gly Arg Ala Ser Ala Met Ser
130 135 140
Asn Thr Pro Thr His Ser Ile Ala Ala Ser Ile Ser Gln Pro Gln Thr
145 150 155 160
Pro Thr Pro Ser Pro Ile Ile Ser Pro Ser Ala Met Leu Pro Ile Tyr
165 170 175
Pro Ala Ile Asp Ile Asp Ala Gln Thr Glu Ser Asn His Asp Thr Ala
180 185 190
Leu Thr Leu Ala Cys Ala Gly Gly His Glu Glu Leu Val Gln Thr Leu
195 200 205
Leu Glu Arg Gly Ala Ser Ile Glu His Arg Asp Lys Lys Gly Phe Thr
210 215 220
Pro Leu Ile Leu Ala Ala Thr Ala Gly His Val Gly Val Val Glu Ile
225 230 235 240
Leu Leu Asp Asn Gly Ala Asp Ile Glu Ala Gln Ser Glu Arg Thr Lys
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Asp Thr Pro Leu Ser Leu Ala Cys Ser Gly Gly Arg Gln Glu Val Val
260 265 270
Glu Leu Leu Leu Ala Arg
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<210> 3637
<211> 2128
<212> DNA
<213> Homo sapiens

<400> 3637
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1680

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<210> 3638
 <211> 200
 <212> PRT
 <213> Homo sapiens

<400> 3638
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 35 40 45
 Arg Cys Ser Tyr Pro Val His Asp Glu Ser Arg Gln Met Met Val Met
 50 55 60
 Val Glu Glu Cys Gly Arg Tyr Ala Ser Phe Gln Gly Ile Pro Ser Ala
 65 70 75 80
 Glu Trp Arg Ile Cys Thr Ile Val Thr Gly Leu Gly Cys Gly Leu Leu
 85 90 95
 Leu Leu Val Ala Leu Thr Ala Leu Met Gly Cys Cys Val Ser Asp Leu
 100 105 110
 Ile Ser Arg Thr Val Gly Arg Val Ala Gly Gly Ile Gln Phe Leu Gly
 115 120 125
 Gly Leu Leu Ile Gly Ala Gly Cys Ala Leu Tyr Pro Leu Gly Trp Asp
 130 135 140
 Ser Glu Glu Val Arg Gln Thr Cys Gly Tyr Thr Ser Gly Gln Phe Asp
 145 150 155 160
 Leu Gly Lys Cys Glu Ile Gly Trp Ala Tyr Tyr Cys Thr Gly Ala Gly
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 Ala Thr Ala Ala Met Leu Leu Cys Thr Trp Leu Ala Cys Phe Ser Gly
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 Lys Lys Gln Lys His Tyr Pro Tyr
 195 200

<210> 3639
 <211> 726
 <212> DNA
 <213> Homo sapiens

<400> 3639

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 180
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 480
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<210> 3640

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3640

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Ser	Leu	Ile	Met	Lys	Glu	Met	Pro	Trp	Arg	Thr	Gln	His	Pro	Asn	Phe
			20					25					30		
Ser	Leu	Leu	Asn	Pro	Leu	Lys	Gly	Glu	Ile	Phe	Leu	Leu	Pro	Ala	Arg
			35				40					45			
Val	Tyr	Gly	Asp	Asp	Thr	Leu	Arg	Pro	Cys	Trp	Cys	Trp	Lys	Asn	His
	50					55					60				
Leu	Trp	Gln	Cys	His	Phe	Leu	Arg	Lys	Thr	Tyr	Gln	Ser	Phe	Ala	Met
65					70					75				80	
Phe	Thr	Ile	Asp	Lys	Lys	Arg	Asp	Met	Gln	Ser	Val	Lys	Cys	Ile	Thr
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Leu	Ile	Ile	Cys	Leu	His										
			100												

<210> 3641

<211> 455

<212> DNA

<213> Homo sapiens

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 180
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 300
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<210> 3642

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3642
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 Gln Ser Pro Glu Glu Ser Arg Ser Ser His Ala Ser Arg Asp Leu Ala
 35 40 45
 Pro Leu Glu Arg Arg Ser Gly Arg Gly Ala Arg Asp Ala Arg Ala Leu
 50 55 60
 Thr Ser Trp Ala Pro Val Arg Gly Glu Val Arg Lys Lys Thr Pro Ser
 65 70 75 80
 Glu Val Thr Val Pro Thr Arg Val Asp Ser Pro Arg Pro Asp His Ala
 85 90 95
 Arg Arg Trp Pro Lys Gly Arg Gly Trp Gly Arg Gly Cys Ser Ala Pro
 100 105 110
 Ser Ser Arg Ala Ala Ser Leu Gln Val Phe Ala Leu Ala Arg Arg Ser
 115 120 125
 Pro Arg Glu Gln Phe Gly Thr Val Arg Ile Gly Phe Arg Glu Pro Ala
 130 135 140
 Phe Lys Thr Arg
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<210> 3643

<211> 2243

<212> DNA

<213> Homo sapiens

<400> 3643
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240
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 1980
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 2243

<210> 3644

<211> 560

<212> PRT

<213> Homo sapiens

<400> 3644

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			20					25					30		
Asp	Met	Ser	Asp	Arg	Arg	Ala	Ala	Val	Ile	Phe	Ala	Asp	Thr	Leu	Thr
		35				40					45				
Leu	Leu	Phe	Glu	Gly	Ile	Ala	Arg	Ile	Val	Glu	Thr	His	Gln	Pro	Ile
	50					55				60					
Val	Glu	Thr	Tyr	Tyr	Gly	Pro	Gly	Arg	Leu	Tyr	Thr	Leu	Ile	Lys	Tyr
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Leu	Gln	Val	Glu	Cys	Asp	Arg	Gln	Val	Glu	Lys	Val	Val	Asp	Lys	Phe
			85						90					95	
Ile	Lys	Gln	Arg	Asp	Tyr	His	Gln	Gln	Phe	Arg	His	Val	Gln	Asn	Asn
		100						105					110		
Leu	Met	Arg	Asn	Ser	Thr	Thr	Glu	Lys	Ile	Glu	Pro	Arg	Glu	Leu	Asp
	115						120					125			
Pro	Ile	Leu	Thr	Glu	Val	Thr	Leu	Met	Asn	Ala	Arg	Ser	Glu	Leu	Tyr
	130					135					140				
Leu	Arg	Phe	Leu	Lys	Lys	Arg	Ile	Ser	Ser	Asp	Phe	Glu	Val	Gly	Asp
145					150					155				160	
Ser	Met	Ala	Ser	Glu	Glu	Val	Lys	Gln	Glu	His	Gln	Lys	Cys	Leu	Asp
			165						170					175	
Lys	Leu	Leu	Asn	Asn	Cys	Leu	Leu	Ser	Cys	Thr	Met	Gln	Glu	Leu	Ile
			180					185					190		
Gly	Leu	Tyr	Val	Thr	Met	Glu	Glu	Tyr	Phe	Met	Arg	Glu	Thr	Val	Asn
	195					200						205			
Lys	Ala	Val	Ala	Leu	Asp	Thr	Tyr	Glu	Lys	Gly	Gln	Leu	Thr	Ser	Ser

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<210> 3646

<211> 243

<212> PRT

<213> Homo sapiens

<400> 3646

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		20						25				30			
Thr	Glu	Pro	Pro	Ala	Asn	Leu	Asp	Arg	Leu	Ile	Pro	Met	Tyr	Lys	Gly
	35					40					45				
Ala	Lys	Ile	Gln	Gly	Gly	Ile	Leu	Pro	Gly	Ser	Tyr	His	Tyr	Leu	His
	50					55				60					
Ile	Ala	Lys	Pro	Ala	Ile	Pro	Thr	Pro	Leu	Glu	Val	Gln	Met	Ala	Gln
65					70				75					80	
Pro	Asn	Tyr	Gly	Leu	Glu	Leu	Val	Thr	Gly	Ser	Ala	Lys	Asn	Gly	Thr
			85					90						95	
Tyr	Phe	Arg	Ile	His	Ile	Asn	Lys	Tyr	Lys	Met	Val	Glu	Thr	Ile	Thr
			100					105					110		
Cys	Leu	Ser	Arg	Glu	Pro	Phe	Pro	Ala	Ser	Asn	Tyr	Ile	Arg	Leu	Phe
		115						120				125			
Gly	Gln	His	Glu	Gln	Leu	Leu	Asn	Asn	Leu	Cys	Ala	Arg	Tyr	Asp	Glu
	130					135				140					
Asn	Leu	Ile	Thr	Asp	Leu	Tyr	Ser	Tyr	Phe	Thr	Glu	Pro	Trp	Cys	Leu
145					150				155					160	
Ala	Leu	Phe	His	Asp	Arg	Phe	Ile	Asp	Leu	Arg	Lys	Glu	Leu	Arg	Gln
			165					170					175		
Ile	Leu	Ala	Ser	Lys	Glu	Glu	Glu	Asp	Leu	Pro	Ser	Ile	Glu	Gln	Leu

		180						185						190					
Ala	His	Gln	Ile	Glu	Asp	Glu	Glu	Ile	Asn	Pro	Thr	Glu	Lys	Pro	Arg				
		195						200					205						
Gln	Tyr	Leu	Lys	Arg	Val	Phe	Glu	Glu	Ser	Ile	Tyr	Lys	Thr	Leu	Val				
		210						215					220						
Glu	Arg	Ser	Thr	Leu	Asp	Tyr	Leu	His	Tyr	Asn	Arg	Tyr	His	Leu	Pro				
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Met	Tyr	Ala																	

<210> 3647

<211> 584

<212> DNA

<213> Homo sapiens

<400> 3647

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240
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<210> 3648

<211> 63

<212> PRT

<213> Homo sapiens

<400> 3648

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Ala	Trp	Leu	Trp	Ala	Arg	Met	Pro	Leu	Ser	Ala	Val	Thr	Ser	His	Cys				
		20						25				30							
Val	Ser	Ser	Arg	Trp	Arg	Ser	Pro	Thr	Arg	Ala	Pro	Thr	Pro	Ala	Thr				
		35					40					45							
Cys	Thr	Thr	Ile	Thr	Val	Ala	Cys	Thr	Asn	Ala	Ala	Ser	Ser	Thr					
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<210> 3649

<211> 648

<212> DNA

<213> Homo sapiens

<400> 3649

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648

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<210> 3650

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3650

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20           25           30
Ile Ser Ala Asp Val Lys Glu Val Leu Leu Thr Asp Gly Asn Glu Lys
35           40           45
Ala Ile Arg Asn Val Gln Asp Ile Ile Thr Arg Asn Gln Lys Ala Gly
50           55           60
Val Phe Lys Thr Gln Lys Ile Ser Ser Cys Val Leu Arg Trp Asp Asn
65           70           75           80
Glu Thr Asp Val Ser Gln Leu Glu Gly His Phe Asp Ile Val Met Cys
85           90           95
Ala Asp Cys Leu Phe Leu Asp Gln Tyr Arg Ala Ser Leu Val Asp Ala
100          105          110
Ile Lys Arg Leu Leu Gln Pro Arg Gly Lys Ala Met Val Phe Ala Pro
115          120          125
Arg Arg Gly Asn Thr Leu Asn Gln Phe Cys Asn Leu Ala Glu Lys Ala
130          135          140
Gly Phe Cys Ile Gln Arg His Glu Asn Tyr Asp Glu His Ile Ser Asn
145          150          155          160
Phe His Ser Lys Leu Lys Lys Glu Asn Pro Asp Ile Tyr Glu Glu Asn

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 <212> DNA
 <213> Homo sapiens

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<211> 384

<212> PRT

<213> Homo sapiens

<400> 3652

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Thr	Leu	Lys	Lys	Trp	Ile	Ser	Leu	Thr	Asn	Phe	Ile	Ser	Glu	Ala	Thr		
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His	Trp	Lys	Arg	Leu	Leu	His	Leu	Leu	Cys	Arg	Ser	Glu	Ala	Ala	Met		
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Gln	Leu	Gly	Glu	Ile	Pro	Ala	Asp	Phe	Phe	Val	Asp	Ile	Val	Ser	Gln		
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Asp	Asn	Phe	Leu	Thr	Ser	Thr	Leu	Gln	Val	Phe	Phe	Ser	Ser	Ala	Cys		
			325					330					335				
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Ala	His	Leu	Thr	Lys	Lys	Phe	Arg	Trp	Asp	Phe	Ala	Ala	Glu	Pro	Glu		
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<211> 283

<212> DNA

<213> Homo sapiens

<400> 3653

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<212> PRT
<213> Homo sapiens

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35 40 45
Ser Ser Glu Leu Arg Leu His Ile Phe Ala Asp Trp Glu Glu Gly Arg
50 55 60
Arg Arg Gly Arg Ile Val Ser Gly Ala Ala Phe Trp Gly Cys Leu Pro
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<210> 3655
<211> 3477
<212> DNA
<213> Homo sapiens

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<211> 429

<212> PRT

<213> Homo sapiens

<400> 3656

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			20					25					30		
Lys	Ala	Gly	Thr	Gly	Ser	Met	Arg	Ser	Gly	Phe	Pro	Ala	Lys	Ser	Ala
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Met	Trp	Arg	Tyr	Arg	Gly	Thr	Pro	Phe	Ser	Lys	Ala	Val	Glu	His	Ile
	50				55						60				
Asn	Lys	Thr	Ile	Ala	Pro	Ala	Leu	Val	Ser	Lys	Lys	Leu	Asn	Val	Thr

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			100					105					110		
Val	Cys	Lys	Ala	Gly	Ala	Val	Glu	Lys	Gly	Val	Pro	Leu	Tyr	Arg	His
		115					120					125			
Ile	Ala	Asp	Leu	Ala	Gly	Asn	Ser	Glu	Val	Ile	Leu	Pro	Val	Pro	Ala
	130					135					140				
Phe	Asn	Val	Ile	Asn	Gly	Gly	Ser	His	Ala	Gly	Asn	Lys	Leu	Ala	Met
145					150					155					160
Gln	Glu	Phe	Met	Ile	Leu	Pro	Val	Gly	Ala	Ala	Asn	Phe	Arg	Glu	Ala
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Met	Arg	Ile	Gly	Ala	Glu	Val	Tyr	His	Asn	Leu	Lys	Asn	Val	Ile	Lys
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Glu	Lys	Tyr	Gly	Lys	Asp	Ala	Thr	Asn	Val	Gly	Asp	Glu	Gly	Gly	Phe
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Val	Ala	Ala	Ser	Glu	Phe	Phe	Arg	Ser	Gly	Lys	Tyr	Asp	Leu	Asp	Phe
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Leu	Lys	Val	Asn	Gln	Ile	Gly	Ser	Val	Thr	Glu	Ser	Leu	Gln	Ala	Cys
		340						345					350		
Lys	Leu	Ala	Gln	Ala	Asn	Gly	Trp	Gly	Val	Met	Val	Ser	His	Arg	Ser
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Gly	Glu	Thr	Glu	Asp	Thr	Phe	Ile	Ala	Asp	Leu	Val	Val	Gly	Leu	Cys
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Thr	Gly	Gln	Ile	Lys	Thr	Gly	Ala	Pro	Cys	Arg	Ser	Glu	Arg	Leu	Ala
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Lys	Tyr	Asn	Gln	Leu	Leu	Arg	Ile	Glu	Glu	Glu	Leu	Gly	Ser	Lys	Ala
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<211> 337

<212> DNA

<213> Homo sapiens

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<210> 3658

<211> 99

<212> PRT

<213> Homo sapiens

<400> 3658

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Leu	Arg	Val	His	Phe	Arg	Leu	Lys	Ala	Tyr	Thr	Cys	Arg	Cys	Val	Thr
			20					25					30		
Cys	Ser	Phe	Ser	Ala	Gln	Gly	Val	His	Val	Gln	Val	Cys	Tyr	Val	Phe
		35				40					45				
Ile	Phe	Gly	Ser	Arg	Leu	Thr	Arg	Ala	Gly	Val	Pro	His	Val	His	Phe
	50					55				60					
Arg	Leu	Lys	Ala	Tyr	Met	Cys	Arg	Cys	Val	Thr	Cys	Ser	Leu	Ser	Ala
65				70					75					80	
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<210> 3659

<211> 1025

<212> DNA

<213> Homo sapiens

<400> 3659

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Ala	Arg	Phe	Tyr	Ile	Gly	Glu	Met	Val	Leu	Ala	Ile	Asp	Ser	Ile	His
			180						185				190		
Gln	Leu	His	Tyr	Val	His	Arg	Asp	Ile	Lys	Pro	Asp	Asn	Val	Leu	Leu
	195						200					205			
Asp	Val	Asn	Gly	His	Ile	Arg	Leu	Ala	Asp	Phe	Gly	Ser	Cys	Leu	Lys
	210					215					220				
Met	Asn	Asp	Asp	Gly	Thr	Val	Gln	Ser	Ser	Val	Ala	Val	Gly	Thr	Pro

225		230		235		240
Asp Tyr Ile Ser Pro Glu Ile Leu Gln Ala Met Glu Asp Gly Met Gly						
	245		250		255	
Lys Tyr Gly Pro Glu Cys Asp Trp Trp Ser Leu Gly Val Cys Met Tyr						
	260		265		270	
Glu Met Leu Tyr Gly Glu Thr Pro Phe Tyr Ala Glu Ser Leu Val Glu						
	275		280		285	
Thr Tyr Gly Lys Ile Met Asn His Glu Glu Arg Phe Gln Phe Pro Ser						
	290		295		300	
His Val Thr Asp Val Ser Glu Glu Ala Lys Asp Leu Ile Gln Arg Leu						
305		310		315		320
Ile Cys Ser Arg Glu Arg Arg Leu Gly Gln Asn Gly Ile Glu Asp Phe						
	325		330		335	
Lys Lys His Ala Phe Phe Glu Gly Leu Asn Trp Glu Asn Ile Arg Asn						
	340		345		350	
Leu Glu Ala Pro Tyr Ile Pro Asp Val Ser Ser Pro Ser Asp Thr Ser						
	355		360		365	
Asn Phe Asp Val Asp Asp Asp Val Leu Arg Asn Thr Glu Ile Leu Pro						
	370		375		380	
Pro Gly Ser His Thr Gly Phe Ser Gly Leu His Leu Pro Phe Ile Gly						
385		390		395		400
Phe Thr Phe Thr Thr Glu Ser Cys Phe Ser Asp Arg Gly Ser Leu Lys						
	405		410		415	
Ser Ile Met Gln Ser Asn Thr Leu Thr Lys Asp Glu Asp Val Gln Arg						
	420		425		430	
Asp Leu Glu His Ser Leu Gln Met Glu Ala Tyr Glu Arg Arg Ile Arg						
	435		440		445	
Arg Leu Glu Gln Glu Lys Leu Glu Leu Ser Arg Lys Leu Gln Glu Ser						
	450		455		460	
Thr Gln Thr Val Gln Ser Leu His Gly Ser Ser Arg Ala Leu Ser Asn						
465		470		475		480
Ser Asn Arg Asp Lys Glu Ile Lys Lys Leu Asn Glu Glu Ile Glu Arg						
	485		490		495	
Leu Lys Asn Lys Ile Ala Asp Ser Asn Arg Leu Glu Arg Gln Leu Glu						
	500		505		510	
Asp Thr Val Ala Leu Arg Gln Glu Arg Glu Asp Ser Thr Gln Arg Leu						
	515		520		525	
Arg Gly Leu Glu Lys Gln His Arg Val Val Arg Gln Glu Lys Glu Glu						
	530		535		540	
Leu His Lys Gln Leu Val Glu Ala Ser Glu Arg Leu Lys Ser Gln Ala						
545		550		555		560
Lys Glu Leu Lys Asp Ala His Gln Gln Arg Lys Leu Ala Leu Gln Glu						
	565		570		575	
Phe Ser Glu Leu Asn Glu Arg Met Ala Glu Leu Arg Ala Gln Lys Gln						
	580		585		590	
Lys Val Ser Arg Gln Leu Arg Asp Lys Glu Glu Glu Met Glu Val Ala						
	595		600		605	
Thr Gln Lys Val Asp Ala Met Arg Gln Glu Met Arg Arg Ala Glu Lys						
	610		615		620	
Leu Arg Lys Glu Leu Glu Ala Gln Leu Asp Asp Ala Val Ala Glu Ala						
625		630		635		640
Ser Lys Glu Arg Lys Leu Arg Glu His Ser Glu Asn Phe Cys Lys Gln						
	645		650		655	
Met Glu Ser Glu Leu Glu Ala Leu Lys Val Lys Gln Gly Gly Arg Gly						

Ala	Gly	Ala	Thr	Leu	Glu	His	Gln	Gln	Glu	Ile	Ser	Lys	Ile	Lys	Ser	
		675					680					685				
Glu	Leu	Glu	Lys	Lys	Val	Leu	Phe	Tyr	Glu	Glu	Glu	Leu	Val	Arg	Arg	
	690					695					700					
Glu	Ala	Ser	His	Val	Leu	Glu	Val	Lys	Asn	Val	Lys	Lys	Glu	Val	His	
705					710					715					720	
Asp	Ser	Glu	Ser	His	Gln	Leu	Ala	Leu	Gln	Lys	Glu	Ile	Leu	Met	Leu	
				725					730					735		
Lys	Asp	Lys	Leu	Glu	Lys	Ser	Lys	Arg	Glu	Arg	His	Asn	Glu	Met	Glu	
			740					745					750			
Glu	Ala	Val	Gly	Thr	Ile	Lys	Asp	Lys	Tyr	Glu	Arg	Glu	Arg	Ala	Met	
	755						760					765				
Leu	Phe	Asp	Glu	Asn	Lys	Lys	Leu	Thr	Ala	Glu	Asn	Glu	Lys	Leu	Cys	
	770					775					780					
Ser	Phe	Val	Asp	Lys	Leu	Thr	Ala	Gln	Asn	Arg	Gln	Leu	Glu	Asp	Glu	
785					790					795					800	
Leu	Gln	Asp	Leu	Ala	Lys	Lys	Glu	Ser	Val	Ala	His	Trp	Glu	Ala		
				805				810					815			
Gln	Ile	Ala	Glu	Ile	Ile	Gln	Trp	Val	Ser	Asp	Glu	Lys	Asp	Ala	Arg	
			820					825					830			
Gly	Tyr	Leu	Gln	Ala	Leu	Ala	Ser	Lys	Met	Thr	Glu	Glu	Leu	Glu	Ala	
		835					840					845				
Leu	Arg	Ser	Ser	Ser	Leu	Gly	Ser	Arg	Thr	Leu	Asp	Pro	Leu	Trp	Lys	
	850					855					860					
Val	Arg	Arg	Ser	Gln	Lys	Leu	Asp	Met	Ser	Ala	Arg	Leu	Glu	Leu	Gln	
865					870					875					880	
Ser	Ala	Leu	Glu	Ala	Glu	Ile	Arg	Ala	Lys	Gln	Leu	Val	Gln	Glu	Glu	
				885				890						895		
Leu	Arg	Lys	Val	Lys	Asp	Ala	Asn	Leu	Thr	Leu	Glu	Ser	Lys	Leu	Lys	
			900				905						910			
Asp	Ser	Glu	Ala	Lys	Asn	Arg	Glu	Leu	Leu	Glu	Glu	Met	Glu	Ile	Leu	
		915					920					925				
Lys	Lys	Lys	Met	Glu	Glu	Lys	Phe	Arg	Ala	Asp	Thr	Gly	Leu	Lys	Leu	
	930					935					940					
Pro	Asp	Phe	Gln	Asp	Ser	Ile	Phe	Glu	Tyr	Phe	Asn	Thr	Ala	Pro	Leu	
945					950					955					960	
Ala	His	Asp	Leu	Thr	Phe	Arg	Asp	Ser	Leu	Ser	Ser	Ser	Ser	Ala	Ser	
				965					970					975		
Ser	Leu	Leu	Ala	Phe	Trp	Glu	Glu	Thr	Ser	Ser	Ala	Ser	Glu	Gln	Glu	
			980					985					990			

1090	1095	1100
Val Asp Val Gln Arg Gly Ile Gly Thr Ala Tyr Lys Gly His Val Lys		
1105	1110	1115
Val Pro Lys Pro Thr Gly Val Lys Lys Gly Trp Gln Arg Ala Tyr Ala		1120
	1125	1130
Val Val Cys Asp Cys Lys Leu Phe Leu Tyr Asp Leu Pro Glu Gly Lys		1135
	1140	1145
Ser Thr Gln Pro Gly Val Ile Ala Ser Gln Val Leu Asp Leu Arg Asp		1150
	1155	1160
Asp Glu Phe Ser Val Ser Ser Val Leu Ala Ser Asp Val Ile His Ala		1165
	1170	1175
Thr Arg Arg Asp Ile Pro Cys Ile Phe Arg Val Thr Ala Ser Leu Leu		1180
1185	1190	1195
Gly Ala Pro Ser Lys Thr Ser Ser Leu Leu Ile Leu Thr Glu Asn Glu		1200
	1205	1210
Asn Glu Lys Arg Lys Trp Val Gly Ile Leu Glu Gly Leu Gln Ser Ile		1215
	1220	1225
Leu His Lys Asn Arg Leu Arg Asn Gln Val Val His Val Pro Leu Glu		1230
	1235	1240
Ala Tyr Asp Ser Ser Leu Pro Leu Ile Lys Ala Ile Leu Thr Ala Ala		1245
	1250	1255
Ile Val Asp Ala Asp Arg Ile Ala Val Gly Leu Glu Glu Gly Leu Tyr		1260
1265	1270	1275
Val Ile Glu Val Thr Arg Asp Val Ile Val Arg Ala Ala Asp Cys Lys		1280
	1285	1290
Lys Val His Gln Ile Glu Leu Ala Pro Arg Glu Lys Ile Val Ile Leu		1295
	1300	1305
Leu Cys Gly Arg Asn His His Val His Leu Tyr Pro Trp Ser Ser Leu		1310
	1315	1320
Asp Gly Ala Glu Gly Ser Phe Asp Ile Lys Leu Pro Glu Thr Lys Gly		1325
	1330	1335
Cys Gln Leu Met Ala Thr Ala Thr Leu Lys Arg Asn Ser Gly Thr Cys		1340
1345	1350	1355
Leu Phe Val Ala Val Lys Arg Leu Ile Leu Cys Tyr Glu Ile Gln Arg		1360
	1365	1370
Thr Lys Pro Phe His Arg Lys Phe Asn Glu Ile Val Ala Pro Gly Ser		1375
	1380	1385
Val Gln Cys Leu Ala Val Leu Arg Asp Arg Leu Cys Val Gly Tyr Pro		1390
	1395	1400
Ser Gly Phe Cys Leu Leu Ser Ile Gln Gly Asp Gly Gln Pro Leu Asn		1405
	1410	1415
Leu Val Asn Pro Asn Asp Pro Ser Leu Ala Phe Leu Ser Gln Gln Ser		1420
1425	1430	1435
Phe Asp Ala Leu Cys Ala Val Glu Leu Glu Ser Glu Glu Tyr Leu Leu		1440
	1445	1450
Cys Phe Ser His Met Gly Leu Tyr Val Asp Pro Gln Gly Arg Arg Ala		1455
	1460	1465
Arg Ala Gln Glu Leu Met Trp Pro Ala Ala Pro Val Ala Cys Ser Cys		1470
	1475	1480
Ser Pro Thr His Val Thr Val Tyr Ser Glu Tyr Gly Val Asp Val Phe		1485
	1490	1495
Asp Val Arg Thr Met Glu Trp Val Gln Thr Ile Gly Leu Arg Arg Ile		1500
1505	1510	1515
Arg Pro Leu Asn Ser Glu Gly Thr Leu Asn Leu Leu Asn Cys Glu Pro		1520

1525																1530				1535							
Pro	Arg	Leu	Ile	Tyr	Phe	Lys	Ser	Lys	Phe	Ser	Gly	Ala	Val	Leu	Asn												
1540																1545				1550							
Val	Pro	Asp	Thr	Ser	Asp	Asn	Ser	Lys	Lys	Gln	Met	Leu	Arg	Thr	Arg												
1555																1560				1565							
Ser	Lys	Arg	Arg	Phe	Val	Phe	Lys	Val	Pro	Glu	Glu	Glu	Arg	Leu	Gln												
1570																1575				1580							
Gln	Arg	Arg	Glu	Met	Leu	Arg	Asp	Pro	Glu	Leu	Arg	Ser	Lys	Met	Ile												
1585																1590				1595				1600			
Ser	Asn	Pro	Thr	Asn	Phe	Asn	His	Val	Ala	His	Met	Gly	Pro	Gly	Asp												
1605																1610				1615							
Gly	Met	Gln	Val	Leu	Met	Asp	Leu	Pro	Leu	Ser	Ala	Val	Pro	Pro	Ser												
1620																1625				1630							
Gln	Glu	Glu	Arg	Pro	Gly	Pro	Ala	Pro	Thr	Asn	Leu	Ala	Arg	Gln	Pro												
1635																1640				1645							
Pro	Ser	Arg	Asn	Lys	Pro	Tyr	Ile	Ser	Trp	Pro	Ser	Ser	Gly	Gly	Ser												
1650																1655				1660							
Glu	Pro	Ser	Val	Thr	Pro	Leu	Arg	Ser	Met	Ser	Asp	Pro	Asp	Gln													
1665																1670				1675				1680			
Asp	Phe	Asp	Lys	Glu	Pro	Asp	Ser	Asp	Ser	Thr	Lys	His	Ser	Thr	Pro												
1685																1690				1695							
Ser	Asn	Ser	Ser	Asn	Pro	Ser	Gly	Pro	Pro	Ser	Pro	Asn	Ser	Pro	His												
1700																1705				1710							
Arg	Ser	Gln	Leu	Pro	Leu	Glu	Gly	Leu	Glu	Gln	Pro	Ala	Cys	Asp	Thr												
1715																1720				1725							

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<210> 3667
<211> 505
<212> DNA
<213> Homo sapiens
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<400> 3667
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60
taattcccta tgtaacaag tttaataagt catctgtaac agtacaatta agtccatata
120
tgattgtatt tactctttct tccctactca tagtatgcgt tccattttga ggaatcacag
180
atatcgaaga gatgccagaa cactagaaga tgaagaagag atgtggttta acacagatga
240
agatgacatg gaagatggag aagctgtagt gtctccatct gacaaaacta aaaatgatga
300
tgatattatg gatccaataa gtaaattcat ggaaaggaag aaattaaaag aaagtgagga
360
aaaggaagtg cttctgaaaa caaacctttc tggacggcag agcccaagtt tcaagctttc
420
cctgtccagt ggaacgaaga ctaacctcac cagccagtca tctacaacaa atctgcctgg
480
ttctccggga tcacctggat ccca
505
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<210> 3668
<211> 117
<212> PRT
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<213> Homo sapiens

<400> 3668

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Met Arg Ser Ile Leu Arg Asn His Arg Tyr Arg Arg Asp Ala Arg Thr
 1           5           10           15
Leu Glu Asp Glu Glu Glu Met Trp Phe Asn Thr Asp Glu Asp Asp Met
           20           25           30
Glu Asp Gly Glu Ala Val Val Ser Pro Ser Asp Lys Thr Lys Asn Asp
           35           40           45
Asp Asp Ile Met Asp Pro Ile Ser Lys Phe Met Glu Arg Lys Lys Leu
           50           55           60
Lys Glu Ser Glu Glu Lys Glu Val Leu Leu Lys Thr Asn Leu Ser Gly
65           70           75           80
Arg Gln Ser Pro Ser Phe Lys Leu Ser Leu Ser Ser Gly Thr Lys Thr
           85           90           95
Asn Leu Thr Ser Gln Ser Ser Thr Thr Asn Leu Pro Gly Ser Pro Gly
           100          105          110
Ser Pro Gly Ser Pro
           115

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<210> 3669

<211> 1226

<212> DNA

<213> Homo sapiens

<400> 3669

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cttgactccc agcattctca tctcaccttg ccatactata agatgtcttg tttgtctatg
60
gctgaggttc tggcccgcac ggactggaca gtagaggatg gattacagaa atacgagaga
120
ggattaatct ttacattaa tcattcactt tatgaaaacc tggatgaaga attaaatgaa
180
gaattagcag caaaagtggg tcagatgttt tatgtggctg agccaaagca agtgcccat
240
attctctgta gtccttctat gaagaatatt aatcctttaa ctgccatgag ctatctaagg
300
aagatggata cttctgggtt ttcattccatc ttagtgacac tgagcaaggc agcagtggca
360
ctgaaaatgg gagatcttga cgtgtacaga aatgaaatga aaagccatcc agagatgaag
420
ttggtgtgtg gcttcatttt ggaaccacgc ctggttgattc aacacaggaa gggacagatt
480
gttccaactg agcttgcgac tcacttgaag gagactcagc caggattgct tgtggcttca
540
gtcctgggat tgcagaagaa cagcaaaatt gggattgaag aagcagattc tttctttaag
600
gtgctttgtg gtaaggatga agataccatc cctcagctct tgatagactt ttgggaagct
660
cagctagtgg catgtctccc agatgtggta cttcaggaac tctttttcaa actcacatca
720
cagtacatct ggagattgtc taagaggcag cctcctgaca ccacaccatt gcgaacatcg
780
gaggatctga taaatgcctg tagtcattat ggcttaattt atccatgggt tcacgtcgta
840

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atatcatctg attctttagc tgataaaaat tatacagaag atctttcaaa attacagtct
 900
 cttatatgtg gtccttcatt tgacatagct tccattattc cgttcttggg gccactttca
 960
 gaagacacta ttgccggcct cagtgtccat gttctgtgtc gtacacgctt gaaagagtat
 1020
 gaacagtgcg tagacatact gttagagaga tgcccggagg cagtcattcc atatgcta
 1080
 catgaactga aagaagagaa ccggactctg tgggtggaaaa aactgttgcc tgaactttgt
 1140
 cagagaataa aatgtggtgg agagaagtat caactctacc tgtcatcatt aaaagcttaa
 1200
 ttttcacggg aactgtggaa gctagc
 1226

<210> 3670

<211> 385

<212> PRT

<213> Homo sapiens

<400> 3670

Met	Ser	Gly	Leu	Ser	Met	Ala	Glu	Val	Leu	Ala	Arg	Thr	Asp	Trp	Thr
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Val	Glu	Asp	Gly	Leu	Gln	Lys	Tyr	Glu	Arg	Gly	Leu	Ile	Phe	Tyr	Ile
			20					25					30		
Asn	His	Ser	Leu	Tyr	Glu	Asn	Leu	Asp	Glu	Glu	Leu	Asn	Glu	Glu	Leu
		35				40						45			
Ala	Ala	Lys	Val	Val	Gln	Met	Phe	Tyr	Val	Ala	Glu	Pro	Lys	Gln	Val
	50					55					60				
Pro	His	Ile	Leu	Cys	Ser	Pro	Ser	Met	Lys	Asn	Ile	Asn	Pro	Leu	Thr
65					70					75				80	
Ala	Met	Ser	Tyr	Leu	Arg	Lys	Met	Asp	Thr	Ser	Gly	Phe	Ser	Ser	Ile
			85						90					95	
Leu	Val	Thr	Leu	Ser	Lys	Ala	Ala	Val	Ala	Leu	Lys	Met	Gly	Asp	Leu
			100					105					110		
Asp	Val	Tyr	Arg	Asn	Glu	Met	Lys	Ser	His	Pro	Glu	Met	Lys	Leu	Val
		115				120					125				
Cys	Gly	Phe	Ile	Leu	Glu	Pro	Arg	Leu	Leu	Ile	Gln	His	Arg	Lys	Gly
	130					135					140				
Gln	Ile	Val	Pro	Thr	Glu	Leu	Ala	Thr	His	Leu	Lys	Glu	Thr	Gln	Pro
145					150					155				160	
Gly	Leu	Leu	Val	Ala	Ser	Val	Leu	Gly	Leu	Gln	Lys	Asn	Ser	Lys	Ile
			165						170					175	
Gly	Ile	Glu	Glu	Ala	Asp	Ser	Phe	Phe	Lys	Val	Leu	Cys	Gly	Lys	Asp
			180					185					190		
Glu	Asp	Thr	Ile	Pro	Gln	Leu	Leu	Ile	Asp	Phe	Trp	Glu	Ala	Gln	Leu
	195					200						205			
Val	Ala	Cys	Leu	Pro	Asp	Val	Val	Leu	Gln	Glu	Leu	Phe	Phe	Lys	Leu
	210					215						220			
Thr	Ser	Gln	Tyr	Ile	Trp	Arg	Leu	Ser	Lys	Arg	Gln	Pro	Pro	Asp	Thr
225					230					235				240	
Thr	Pro	Leu	Arg	Thr	Ser	Glu	Asp	Leu	Ile	Asn	Ala	Cys	Ser	His	Tyr
			245						250					255	
Gly	Leu	Ile	Tyr	Pro	Trp	Val	His	Val	Val	Ile	Ser	Ser	Asp	Ser	Leu

[illegible]

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<210> 3671
<211> 828
<212> DNA
<213> Homo sapiens
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<400> 3671
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ccaatgaaat tatgtatctt tattttaatga aaatgcctgc tgcgtaccaaa ggtatgtact
120
agggcatctg gggtaagtaa aaacaaacac atagagcctg cctggagaag ctcatggctt
180
gatggaaaaga taagcaagaa gagttaattt ctaatcaata tgataaaaag gtcagagagc
240
agtttctgaa aaacatgttt ttgagttgag tcctgaaaga caaggagatg ttagtaaagc
300
agagaaggga gaattcattc tagaaagatc agacaatgtg tgggaagggc agagtctgaa
360
aagagcatgc ccatttgga gaagcatcaa gaagcccacg cgtagaagc accggcccca
420
tgagacaaag acacagctag agagattgac taggccatgt cggaatgtcc tcttatttta
480
tacatacata agcatataga tacatatagc caaagttacc tttttaatga tcttttttac
540
ccagtgtatt ctggagggtcg aatggtcaca tatgaacatc tccgagaggt tgtgtttggc
600
aaaagtgaag atgagcatta tcccctttgg aaatcagtca ttggagggat gatggctggt
660
gttattggcc agtttttagc caatccaact gacctagtga aggttcagat gcaaatggaa
720
ggaaaaagga aactggaagg aaaaccattg cgatttcgtg gtgtacatca tgcatttgca
780
aaaatcttag ctgaaggagg aatacgaggg ctttgggcag gctgggta
828

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<210> 3672

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3672

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Met Ser Glu Cys Pro Leu Ile Leu Tyr Ile His Lys His Ile Asp Thr
 1           5           10           15
Tyr Ser Gln Ser Tyr Leu Phe Asn Asp Leu Phe Tyr Pro Val Tyr Ser
      20           25           30
Gly Gly Arg Met Val Thr Tyr Glu His Leu Arg Glu Val Val Phe Gly
      35           40           45
Lys Ser Glu Asp Glu His Tyr Pro Leu Trp Lys Ser Val Ile Gly Gly
      50           55           60
Met Met Ala Gly Val Ile Gly Gln Phe Leu Ala Asn Pro Thr Asp Leu
65           70           75           80
Val Lys Val Gln Met Gln Met Glu Gly Lys Arg Lys Leu Glu Gly Lys
      85           90           95
Pro Leu Arg Phe Arg Gly Val His His Ala Phe Ala Lys Ile Leu Ala
      100          105          110
Glu Gly Gly Ile Arg Gly Leu Trp Ala Gly Trp Val
      115          120

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<210> 3673

<211> 1052

<212> DNA

<213> Homo sapiens

<400> 3673

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120
gagcagtggg acagcttcaa tgatcaacat gtcagcagga taacacaaga ggacattaag
180
aaaacacatg gtggatcttc aggaagcaga ggatattatt ctagtgtttt cgcaagttcc
240
acaaatgcat atatgctgat ctatagactg aaggatccag ccagaaatgc aaaatttcta
300
gaagtggatg aatacccaga acatattaaa aacttgggtgc agaaagagag agagttggaa
360
gaacaagaaa agagacaacg agaaattgag cgcaatacat gcaagataaa attattctgt
420
ttgcataccta caaaacaagt aatgatggaa aataaattgg aggttcataa ggataagaca
480
ttaaaggaag cagtagaaat ggcttataag atgatggatt tagaagaggt aatacccctg
540
gattgctgtc gccttggtta atatgatgag tttcatgatt atctagaacg gtcatatgaa
600
ggagaagaag atacaccaat ggggcttcta ctaggtggcg tcaagtcaac atatatgttt
660
gatctgctgt tggagacgag aaagcctgat caggttttcc aatcttataa acctggaggg
720
gagccatttt acaccatttt tagttgggtct gtacttagaa ttttcctgag aaagggtttt
780

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tttttattgt agcaatgaac ataatttaca ttttgtatat ggtcttaca tgtagaataa
 840
 ttttgacagg ttgagaagta ctcagcacca gcttggaatt aagttctaga ttacttgcaa
 900
 agagttgtgt acataatttt aaaaacaaca aaaaacaaca aagcttctag cttacgggtc
 960
 tcagtgggtt ttttcttctc cagtgggctg tactgaatca ttctggatgc tgtcaatccc
 1020
 taaagttatc aattgctctc ttaggaagat ct
 1052

<210> 3674

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3674

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Phe	Ser	Val	Met	Val	His	Ser	Gly	Ser	Ala	Ala	Gly	Gly	His	Tyr	Tyr	20	25	30	
Ala	Cys	Ile	Lys	Ser	Phe	Ser	Asp	Glu	Gln	Trp	Tyr	Ser	Phe	Asn	Asp	35	40	45	
Gln	His	Val	Ser	Arg	Ile	Thr	Gln	Glu	Asp	Ile	Lys	Lys	Thr	His	Gly	50	55	60	
Gly	Ser	Ser	Gly	Ser	Arg	Gly	Tyr	Tyr	Ser	Ser	Ala	Phe	Ala	Ser	Ser	65	70	75	80
Thr	Asn	Ala	Tyr	Met	Leu	Ile	Tyr	Arg	Leu	Lys	Asp	Pro	Ala	Arg	Asn	85	90	95	
Ala	Lys	Phe	Leu	Glu	Val	Asp	Glu	Tyr	Pro	Glu	His	Ile	Lys	Asn	Leu	100	105	110	
Val	Gln	Lys	Glu	Arg	Glu	Leu	Glu	Gln	Glu	Lys	Arg	Gln	Arg	Glu		115	120	125	
Ile	Glu	Arg	Asn	Thr	Cys	Lys	Ile	Lys	Leu	Phe	Cys	Leu	His	Pro	Thr	130	135	140	
Lys	Gln	Val	Met	Met	Glu	Asn	Lys	Leu	Glu	Val	His	Lys	Asp	Lys	Thr	145	150	155	160
Leu	Lys	Glu	Ala	Val	Glu	Met	Ala	Tyr	Lys	Met	Met	Asp	Leu	Glu	Glu	165	170	175	
Val	Ile	Pro	Leu	Asp	Cys	Cys	Arg	Leu	Val	Lys	Tyr	Asp	Glu	Phe	His	180	185	190	
Asp	Tyr	Leu	Glu	Arg	Ser	Tyr	Glu	Gly	Glu	Glu	Asp	Thr	Pro	Met	Gly	195	200	205	
Leu	Leu	Leu	Gly	Gly	Val	Lys	Ser	Thr	Tyr	Met	Phe	Asp	Leu	Leu	Leu	210	215	220	
Glu	Thr	Arg	Lys	Pro	Asp	Gln	Val	Phe	Gln	Ser	Tyr	Lys	Pro	Gly	Gly	225	230	235	240
Glu	Pro	Phe	Tyr	Thr	Ile	Phe	Ser	Trp	Ser	Val	Leu	Arg	Ile	Phe	Leu	245	250	255	
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<210> 3675

<211> 837

<212> DNA

<213> Homo sapiens

<400> 3675

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420
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720
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837

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<210> 3676

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3676

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20          25          30
Gln Glu Gly Gly Gly Ile Ser Arg Val Gly Val Cys Lys Val Met His
35          40          45
Pro Glu Gly Asn Gly Arg Ser Gly Phe Leu Ile His Gly Glu Arg Gln
50          55          60
Lys Asp Lys Leu Val Val Leu Glu Cys Tyr Val Arg Lys Asp Leu Val
65          70          75          80
Tyr Thr Lys Ala Asn Pro Thr Phe His His Trp Lys Val Asp Asn Arg
85          90          95
Lys Phe Gly Leu Thr Phe Gln Ser Pro Ala Asp Ala Arg Ala Phe Asp
100          105          110
Arg Gly Val Arg Lys Ala Ile Glu Asp Leu Ile Glu Glu Val Glu Asn

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Asp Ser Gly Gly Pro Arg Arg Leu Leu Ala Tyr Pro Leu Ser Ser Cys
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Asn Gln Arg Pro Arg Val Tyr Ser Cys His
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<210> 3677
 <211> 418
 <212> DNA
 <213> Homo sapiens

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<400> 3677
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240
tcttctctct catcctctc atcctcgtcc tctcttctct gccctgggaa ctcgggagac
300
tgggataccta gctcgttctc gtcggcacat aagctctcgg gcctctggaa ttccccacat
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tccagtgggg ccattgccagg cagctctctt gggagtctct ctaccatccc tggcgcgc
418

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<210> 3678
 <211> 139
 <212> PRT
 <213> Homo sapiens

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<400> 3678
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Leu Pro Pro Asp Phe Met Pro Lys Leu Val Lys Asn Leu Leu Gly Glu
      20          25          30
Met Pro Leu Trp Val Cys Gln Ser Cys Arg Lys Ser Met Glu Glu Asp
      35          40          45
Glu Arg Gln Thr Gly Arg Glu His Ala Val Ala Ile Ser Leu Ser His
      50          55          60
Thr Ser Cys Lys Ser Gln Ser Cys Gly Asp Asp Ser His Ser Ser Ser
65          70          75          80
Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Cys Pro Gly
      85          90          95
Asn Ser Gly Asp Trp Asp Pro Ser Ser Phe Leu Ser Ala His Lys Leu
      100         105         110
Ser Gly Leu Trp Asn Ser Pro His Ser Ser Gly Ala Met Pro Gly Ser
      115         120         125
Ser Leu Gly Ser Pro Pro Thr Ile Pro Gly Ala
      130         135

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<210> 3679
 <211> 567

<212> DNA

<213> Homo sapiens

<400> 3679

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 120
 gagatcgag agatcaaggc ccagctggag acagccctga agtggaggaa ctatgagggtg
 180
 aagctgcggc tgctgctgca cctggaggaa ctgcagatgg agcatgatat ccggcactat
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<210> 3680

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3680

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Tyr	Pro	Pro	Pro	Arg	Leu	Arg	Gln	Leu	Leu	Pro	Met	Leu	Leu	Gln	Gly
			20					25					30		
Thr	Ser	Ile	Phe	Thr	Ala	Pro	Lys	Glu	Ile	Ala	Glu	Ile	Lys	Ala	Gln
			35					40					45		
Leu	Glu	Thr	Ala	Leu	Lys	Trp	Arg	Asn	Tyr	Glu	Val	Lys	Leu	Arg	Leu
			50				55				60				
Leu	Leu	His	Leu	Glu	Glu	Leu	Gln	Met	Glu	His	Asp	Ile	Arg	His	Tyr
65						70				75				80	
Asp	Leu	Glu	Ser	Val	Pro	Met	Thr	Trp	Asp	Pro	Val	Asp	Gln	Asn	Pro
				85					90					95	
Arg	Leu	Leu	Thr	Leu	Glu	Val	Pro	Gly	Val	Thr	Glu	Ser	Arg	Pro	Ser
			100					105					110		
Val	Leu	Arg	Gly	Asp	His	Leu	Phe	Ala	Leu	Leu	Ser	Ser	Glu	Thr	His
			115				120					125			
Gln	Glu	Asp	Pro	Ile	Thr	Tyr	Lys	Gly	Phe	Val	His	Lys	Val	Glu	Leu
			130				135				140				
Asp	Arg	Val	Lys	Leu	Ser	Phe	Ser	Met	Ser	Leu	Leu	Ser	Arg	Phe	Val
145					150					155				160	
Asp	Gly	Leu	Thr	Phe	Lys	Val	Asn	Phe	Thr	Phe	Asn	Arg	Gln	Pro	Leu
				165					170					175	
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180

185

<210> 3681
 <211> 788
 <212> DNA
 <213> Homo sapiens

<400> 3681
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 120
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 180
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 240
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<210> 3682
 <211> 185
 <212> PRT
 <213> Homo sapiens

<400> 3682
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 Ile Ser Gly Arg Pro Cys Pro Gly Gly Pro Ala Pro Pro Arg His His
 35 40 45
 Gly Pro Pro Gly Pro Thr Phe Phe Arg Gln Gln Asp Gly Leu Leu Arg
 50 55 60
 Gly Gly Tyr Glu Ala Gln Glu Pro Leu Cys Pro Ala Val Pro Pro Arg
 65 70 75 80
 Lys Ala Val Pro Val Thr Ser Phe Thr Tyr Ile Asn Glu Asp Phe Arg

				85					90					95					
Thr	Glu	Ser	Pro	Pro	Ser	Pro	Ser	Ser	Asp	Val	Glu	Asp	Ala	Arg	Glu				
			100					105					110						
Gln	Arg	Ala	His	Asn	Ala	His	Leu	Arg	Gly	Pro	Pro	Pro	Lys	Leu	Ile				
		115					120					125							
Pro	Val	Ser	Gly	Lys	Leu	Glu	Lys	Asn	Ile	Glu	Lys	Ile	Leu	Ile	Arg				
	130					135					140								
Pro	Thr	Ala	Phe	Lys	Pro	Val	Leu	Pro	Lys	Pro	Arg	Gly	Ala	Pro	Ser				
145					150					155					160				
Leu	Pro	Ser	Phe	Met	Gly	Pro	Arg	Ala	Thr	Gly	Leu	Ser	Gly	Ser	Gln				
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Gly	Ser	Leu	Thr	Gln	Leu	Phe	Gly	Gly											
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<210> 3683

<211> 4421

<212> DNA

<213> Homo sapiens

<400> 3683

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<210> 3684

<211> 384

<212> PRT

<213> Homo sapiens

<400> 3684

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Thr	Leu	Glu	Glu	Leu	Thr	Ala	Val	Pro	Phe	Val	Asn	Gly	Val	Leu	Phe
			20					25					30		
Cys	Lys	Val	Arg	Leu	Leu	Asp	Gly	Gly	Asp	Phe	Val	Ser	Leu	Ser	Ser
		35					40					45			
Arg	Glu	Glu	Val	Gln	Glu	Asn	Cys	Val	Arg	Trp	Arg	Lys	Arg	Phe	Thr
	50					55					60				
Phe	Val	Cys	Lys	Met	Ser	Ala	Asn	Pro	Ala	Thr	Gly	Leu	Leu	Asp	Pro
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Cys	Val	Phe	Arg	Val	Ser	Val	Arg	Lys	Glu	Leu	Lys	Gly	Gly	Lys	Ala
			85						90					95	
Tyr	Ser	Lys	Leu	Gly	Phe	Ala	Asp	Leu	Asn	Leu	Ala	Glu	Phe	Ala	Gly
			100					105					110		
Ser	Gly	Ser	Thr	Val	Arg	Cys	Cys	Leu	Leu	Glu	Gly	Tyr	Asp	Thr	Lys
		115					120					125			
Asn	Thr	Arg	Gln	Asp	Asn	Ser	Ile	Leu	Lys	Val	Thr	Ile	Gly	Met	Phe
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Ser	Ile	Ser	Ile	Pro	Gly	Gln	Asp	Ser	Ser	Leu	Gln	Leu	Thr	Cys	Lys
			165						170					175	
Gly	Gly	Gly	Thr	Ser	Ser	Gly	Gly	Ser	Ser	Thr	Asn	Ser	Leu	Thr	Gly
			180					185					190		
Ser	Arg	Pro	Pro	Lys	Ala	Arg	Pro	Thr	Ile	Leu	Ser	Ser	Gly	Leu	Pro
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Gly	Tyr	Ser	Thr	Glu	His	Ser	His	Ser	Ser	Ser	Leu	Ser	Asp	Leu	Thr
			245						250					255	
His	Arg	Arg	Asn	Thr	Ser	Thr	Ser	Ser	Ser	Ala	Ser	Gly	Gly	Leu	Gly
			260					265					270		
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		275					280					285			
Glu	Lys	Pro	Pro	Arg	Pro	Pro	Arg	Pro	Leu	His	Leu	Ser	Asp	Arg	Ser
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Phe	Arg	Arg	Lys	Lys	Asp	Ser	Val	Glu	Ser	His	Pro	Thr	Trp	Val	Asp
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Asp	Thr	Arg	Ile	Asp	Ala	Asp	Ala	Ile	Val	Glu	Lys	Ile	Val	Gln	Ser

				325					330					335					
Gln	Asp	Phe	Thr	Asp	Gly	Ser	Asn	Thr	Glu	Asp	Ser	Asn	Leu	Arg	Leu				
			340					345					350						
Phe	Val	Ser	Arg	Asp	Gly	Ser	Ala	Thr	Leu	Ser	Gly	Ile	Gln	Leu	Ala				
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<210> 3685

<211> 1293

<212> DNA

<213> Homo sapiens

<400> 3685

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<210> 3686
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<400> 3686
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 35 40 45
 Arg Val Pro Cys Leu Cys Pro Pro Arg Arg Arg His Pro Pro Arg Ser
 50 55 60
 Phe Thr Ser Cys Thr Phe Ser Gly Ser Arg Ser His Ile His Pro Thr
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<210> 3687
 <211> 566
 <212> DNA
 <213> Homo sapiens

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<210> 3688

<211> 57
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 <213> Homo sapiens

<400> 3688
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 Xaa Leu His Val Ser Ala Ala Pro His
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<210> 3689
 <211> 1562
 <212> DNA
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<210> 3690

<211> 504

<212> PRT

<213> Homo sapiens

<400> 3690

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			20					25					30		
Thr	Asp	Glu	Ala	Glu	Lys	Arg	Ser	Arg	Lys	Pro	Glu	Lys	Glu	Pro	Arg
		35				40						45			
Arg	Ser	Gly	Arg	Ala	Thr	Asn	His	Asp	Ser	Cys	Asp	Ser	Cys	Lys	Glu
	50					55					60				
Gly	Gly	Asp	Leu	Leu	Cys	Cys	Asp	His	Cys	Pro	Ala	Ala	Phe	His	Leu
65					70					75				80	
Gln	Cys	Cys	Asn	Pro	Pro	Leu	Ser	Glu	Glu	Met	Leu	Pro	Pro	Gly	Glu
			85						90					95	
Trp	Met	Cys	His	Arg	Cys	Thr	Val	Arg	Arg	Lys	Lys	Arg	Glu	Gln	Lys
			100					105					110		
Lys	Glu	Leu	Gly	His	Val	Asn	Gly	Leu	Val	Asp	Lys	Ser	Gly	Lys	Arg
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Thr	Thr	Ser	Pro	Ser	Ser	Asp	Thr	Asp	Leu	Leu	Asp	Arg	Ser	Ala	Ser
	130					135					140				
Lys	Thr	Glu	Leu	Lys	Ala	Ile	Ala	His	Ala	Arg	Ile	Leu	Glu	Arg	Arg
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				165					170					175	
Thr	Ser	Glu	Gln	Asn	Asp	Val	Asp	Glu	Asp	Ile	Ile	Asp	Val	Asp	Glu
			180					185					190		
Glu	Pro	Val	Ala	Ala	Glu	Pro	Asp	Tyr	Val	Gln	Pro	Gln	Leu	Arg	Arg
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Ser Lys Arg Arg Arg Lys Glu Glu Thr Thr Gly Lys Asn Val Lys Lys				240
	245		250	255
Thr Gln His Glu Leu Asp His Asn Gly Leu Val Pro Leu Pro Val Lys				
	260		265	270
Val Cys Phe Thr Cys Asn Arg Ser Cys Arg Val Ala Pro Leu Ile Gln				
	275		280	285
Cys Asp Tyr Cys Pro Leu Leu Phe His Met Asp Cys Leu Glu Pro Pro				
	290	295		300
Leu Thr Ala Met Pro Leu Gly Arg Trp Met Cys Pro Asn His Ile Glu				
305		310		315
His Val Val Leu Asn Gln Lys Asn Met Thr Leu Ser Asn Arg Cys Gln				320
	325		330	335
Val Phe Asp Arg Phe Gln Asp Thr Val Ser Gln His Val Val Lys Val				
	340		345	350
Asp Phe Leu Asn Arg Ile His Lys Lys His Pro Pro Asn Arg Arg Val				
	355		360	365
Leu Gln Ser Val Lys Arg Arg Ser Leu Lys Val Pro Asp Ala Ile Lys				
	370	375		380
Ser Gln Tyr Gln Phe Pro Pro Pro Leu Ile Ala Pro Ala Ala Ile Arg				
385		390		395
Asp Gly Glu Leu Ile Cys Asn Gly Ile Pro Glu Glu Ser Gln Met His				
	405		410	415
Leu Leu Asn Ser Glu His Leu Ala Thr Gln Ala Glu Gln Gln Glu Trp				
	420		425	430
Leu Cys Ser Val Val Ala Leu Gln Cys Ser Ile Leu Lys His Leu Ser				
	435		440	445
Ala Lys Gln Met Pro Ser His Trp Asp Ser Glu Gln Thr Glu Lys Ala				
	450		455	460
Asp Ile Lys Pro Val Ile Val Thr Asp Ser Ser Val Thr Thr Ser Leu				
465		470		475
Gln Thr Ala Asp Lys Thr Pro Thr Pro Ser His Tyr Pro Leu Ser Cys				
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<210> 3691

<211> 418

<212> DNA

<213> Homo sapiens

<400> 3691

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<210> 3692

<211> 94

<212> PRT

<213> Homo sapiens

<400> 3692

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			20					25					30		
Ala	Arg	Gln	Ser	Trp	Gly	Gln	Cys	Gln	Pro	Phe	Tyr	Val	Leu	Arg	Gln
			35				40					45			
Arg	Ile	Ala	Arg	Ile	Arg	Cys	Gln	Leu	Lys	Ala	Val	Cys	Gln	Pro	Arg
			50			55					60				
Cys	Lys	His	Gly	Glu	Cys	Ile	Gly	Pro	Asn	Lys	Cys	Lys	Cys	His	Pro
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Gly	Tyr	Ala	Gly	Lys	Thr	Cys	Asn	Gln	Gly	Arg	Lys	Thr	Val		
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<210> 3693

<211> 2641

<212> DNA

<213> Homo sapiens

<400> 3693

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<211> 390

<212> PRT

<213> Homo sapiens

<400> 3694

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			20					25					30		
Cys	Cys	Ala	Pro	Leu	Gly	Val	Arg	Ala	Ser	Gly	Arg	Ala	Val	Pro	Arg
		35					40					45			
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	50					55				60					
Ser	Asp	Met	Asp	Glu	Thr	Ile	Asp	Val	Gly	Ser	Glu	Asn	Asn	Tyr	Ser
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				85					90					95	
Ser	Gln	Ile	Met	Ala	Arg	Lys	Lys	Arg	Arg	Gly	Ile	Ile	Glu	Lys	Arg
			100					105					110		
Arg	Arg	Asp	Arg	Ile	Asn	Asn	Ser	Leu	Ser	Glu	Leu	Arg	Arg	Leu	Val
		115					120					125			
Pro	Thr	Ala	Phe	Glu	Lys	Gln	Gly	Ser	Ala	Lys	Leu	Glu	Lys	Ala	Glu
		130				135					140				
Ile	Leu	Gln	Met	Thr	Val	Asp	His	Leu	Lys	Met	Leu	Gln	Ala	Thr	Gly
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			165					170					175		
Ile	Gly	Phe	Arg	Glu	Cys	Leu	Thr	Glu	Val	Ala	Arg	Tyr	Leu	Ser	Ser
			180					185					190		
Val	Glu	Gly	Leu	Asp	Ser	Ser	Asp	Pro	Leu	Arg	Val	Arg	Leu	Val	Ser
		195					200				205				
His	Leu	Ser	Thr	Cys	Ala	Thr	Gln	Arg	Glu	Ala	Ala	Ala	Met	Thr	Ser
	210					215				220					
Ser	Met	Ala	His	His	Xaa	Ser	Ser	Ala	Pro	Pro	Ala	Ser	Leu	Gly	Arg
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Arg	Leu	Pro	Pro	Pro	Ala	Arg	Ser	Pro	Ala	Pro	Ala	Gln	Arg	Pro	Pro
				245					250					255	
Cys	Leu	Arg	Val	Asn	Pro	Leu	Ser	Pro	Leu	His	Asn	Phe	Arg	Ser	Ala
			260					265				270			
Ser	Ala	His	Gly	Ser	Ala	Leu	Leu	Thr	Ala	Thr	Phe	Ala	His	Ala	Asp

275						280					285				
Ser	Ala	Leu	Arg	Met	Pro	Ser	Thr	Gly	Ser	Val	Ala	Pro	Cys	Val	Pro
290						295					300				
Pro	Leu	Ser	Thr	Ser	Leu	Leu	Ser	Leu	Ser	Ala	Thr	Val	His	Ala	Ala
305						310					315				
Ala	Ala	Ala	Ala	Thr	Ala	Ala	Ala	His	Ser	Phe	Pro	Leu	Ser	Phe	Ala
325						330					335				
Gly	Ala	Phe	Pro	Met	Leu	Pro	Pro	Asn	Ala	Ala	Ala	Ala	Val	Ala	Ala
340						345					350				
Ala	Thr	Ala	Ile	Ser	Pro	Pro	Leu	Ser	Val	Ser	Ala	Thr	Ser	Ser	Pro
355						360					365				
Gln	Gln	Thr	Ser	Ser	Gly	Thr	Asn	Asn	Lys	Pro	Tyr	Arg	Pro	Trp	Gly
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<212> DNA
<213> Homo sapiens
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180
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240
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780
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<210> 3696

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3696

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Tyr	Phe	Ala	Glu	Tyr	Trp	Tyr	Gln	Ala	Gln	Cys	Cys	Gln	Tyr	Asp	Tyr
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Cys	Asn	Ser	Trp	Ser	Ser	Pro	Gln	Leu	Gln	Ser	Ser	Leu	Pro	Glu	Pro
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His	Asp	Arg	Pro	Leu	Ala	Leu	Pro	Leu	Ser	Asp	Ser	Gln	Ile	Gln	Trp
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Phe	Tyr	Gln	Ala	Leu	Asn	Leu	Ser	Leu	Pro	Leu	Pro	Asn	Phe	His	Ala
			85					90					95		
Gly	Thr	Glu	Pro	Asp	Gly	Leu	Asp	Pro	Met	Val	Thr	Leu	Ser	Leu	Asn
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Leu	Gly	Leu	Ser	Phe	Ala	Glu	Leu	Arg	Arg	Met	Tyr	Leu	Phe	Leu	Asn
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<210> 3697

<211> 550

<212> DNA

<213> Homo sapiens

<400> 3697

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 300
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<210> 3698

<211> 183

<212> PRT

<213> Homo sapiens

<400> 3698

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Ile	Gly	Leu	Cys	Arg	Tyr	Gly	Gly	Arg	Ile	Asp	Cys	Cys	Trp	Gly	Trp	20	25	30	
Ala	Arg	Gln	Ser	Trp	Gly	Gln	Cys	Gln	Pro	Val	Cys	Gln	Pro	Arg	Cys	35	40	45	
Lys	His	Gly	Glu	Cys	Ile	Gly	Pro	Asn	Lys	Cys	Lys	Cys	His	Pro	Gly	50	55	60	
Tyr	Ala	Gly	Lys	Thr	Cys	Asn	Gln	Asp	Leu	Asn	Glu	Cys	Gly	Leu	Lys	65	70	75	80
Pro	Arg	Pro	Cys	Lys	His	Arg	Cys	Met	Asn	Thr	Tyr	Gly	Ser	Tyr	Lys	85	90	95	
Cys	Tyr	Cys	Leu	Asn	Gly	Tyr	Met	Leu	Met	Pro	Asp	Gly	Ser	Cys	Ser	100	105	110	
Ser	Ala	Leu	Thr	Cys	Ser	Met	Ala	Asn	Cys	Gln	Tyr	Gly	Cys	Asp	Val	115	120	125	
Val	Lys	Gly	Gln	Ile	Arg	Cys	Gln	Cys	Pro	Ser	Pro	Gly	Leu	Gln	Leu	130	135	140	
Ala	Pro	Asp	Gly	Arg	Thr	Cys	Val	Asp	Val	Asp	Glu	Cys	Ala	Thr	Gly	145	150	155	160
Arg	Ala	Ser	Cys	Pro	Lys	Phe	Arg	Gln	Cys	Val	Asn	Thr	Phe	Gly	Ser	165	170	175	
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 Arg Asp Pro Asn Leu Pro Val His Ile Arg Gly Trp Leu His Lys Gln
 50 55 60
 Asp Ser Ser Gly Leu Arg Leu Trp Lys Arg Arg Trp Phe Val Leu Ser
 65 70 75 80
 Gly His Cys Leu Phe Tyr Tyr Lys Asp Ser Arg Glu Glu Ser Val Leu
 85 90 95
 Gly Ser Val Leu Leu Pro Ser Tyr Asn Ile Arg Pro Asp Gly Pro Gly
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 Ala Pro Arg Gly Arg Arg Phe Thr Phe Thr Ala Glu His Pro Gly
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<400> 3701

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<210> 3702

<211> 236

<212> PRT

<213> Homo sapiens

<400> 3702

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			20					25					30		
Ser	Asn	Leu	Lys	Glu	His	Lys	Lys	Thr	His	Thr	Ala	Asp	Lys	Val	Phe
	35						40					45			
Thr	Cys	Asp	Glu	Cys	Gly	Lys	Ser	Phe	Asn	Met	Gln	Arg	Lys	Leu	Val
	50					55					60				
Lys	His	Arg	Ile	Arg	His	Thr	Gly	Glu	Arg	Pro	Tyr	Ser	Cys	Ser	Ala
65					70				75						80
Cys	Gly	Lys	Cys	Phe	Gly	Gly	Ser	Gly	Asp	Leu	Arg	Arg	His	Val	Arg
				85				90					95		
Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	Thr	Cys	Glu	Ile	Cys	Asn	Lys	Cys
			100					105					110		
Phe	Thr	Arg	Ser	Ala	Val	Leu	Arg	Arg	His	Lys	Lys	Met	His	Cys	Lys
			115				120					125			
Ala	Gly	Asp	Glu	Ser	Pro	Asp	Val	Leu	Glu	Glu	Leu	Ser	Gln	Ala	Ile
	130					135					140				
Glu	Thr	Ser	Asp	Leu	Glu	Lys	Ser	Gln	Ser	Ser	Asp	Ser	Phe	Ser	Gln
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<211> 619

<212> PRT

<213> Homo sapiens

<400> 3704

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Leu	His	Leu	Leu	Lys	Ser	Ser	Cys	Ala	Pro	Ser	Val	Gln	Met	Lys	Ile
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Lys	Glu	Leu	Tyr	Arg	Arg	Arg	Phe	Pro	Arg	Lys	Thr	Leu	Gly	Pro	Ser
	50					55					60				
Asp	Leu	Ser	Leu	Leu	Ser	Leu	Pro	Pro	Gly	Thr	Ser	Pro	Val	Gly	Ser
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Pro	Gly	Pro	Leu	Ala	Pro	Ile	Pro	Pro	Thr	Leu	Leu	Ala	Pro	Gly	Thr
			85						90					95	
Leu	Leu	Gly	Pro	Lys	Arg	Glu	Val	Asp	Met	His	Pro	Pro	Leu	Pro	Gln
			100					105					110		
Pro	Val	His	Pro	Asp	Val	Thr	Met	Lys	Pro	Leu	Pro	Phe	Tyr	Glu	Val
		115					120					125			
Tyr	Gly	Glu	Leu	Ile	Arg	Pro	Thr	Thr	Leu	Ala	Ser	Thr	Ser	Ser	Gln
	130					135					140				
Arg	Phe	Glu	Glu	Ala	His	Phe	Thr	Phe	Ala	Leu	Thr	Pro	Gln	Gln	Val
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Gln	Gln	Ile	Leu	Thr	Ser	Arg	Glu	Val	Leu	Pro	Gly	Ala	Lys	Cys	Asp
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Tyr	Thr	Ile	Gln	Val	Gln	Leu	Arg	Phe	Cys	Leu	Cys	Glu	Thr	Ser	Cys
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Pro	Gln	Glu	Asp	Tyr	Phe	Pro	Pro	Asn	Leu	Phe	Val	Lys	Val	Asn	Gly
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Ser Glu Val Ala Thr Thr Ser Leu Arg Val Ser Leu Met Cys Pro Leu
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Gly Lys Met Arg Leu Thr Val Pro Cys Arg Ala Leu Thr Cys Ala His
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Leu Gln Ser Phe Asp Ala Ala Leu Tyr Leu Gln Met Asn Glu Lys Lys
          340          345          350
Pro Thr Trp Thr Cys Pro Val Cys Asp Lys Lys Ala Pro Tyr Glu Ser
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Asp Gly Leu Gln Tyr Ser Pro Val Gln Gly Gly Asp Pro Ser Glu Asn
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Gln Pro Ser Ser Val Leu Arg Ser Pro Ala Met Gly Thr Leu Gly Gly
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<211> 1737

<212> DNA

<213> Homo sapiens

<400> 3705

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<210> 3706

<211> 191

<212> PRT

<213> Homo sapiens

<400> 3706

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			20					25					30		
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Lys	Ser	Leu	Ile	Asn	Tyr	Glu	Pro	His	Gly	Thr	Arg	Thr	Ala	Gly	Phe
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Gln	His	Ile	Cys	Met	Cys	Ala	Cys	Val	Cys	Ile	Arg	Thr	Ala	Ile	Cys
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Val	Ser	Arg	Ser	Ile	Ser	Ala	Cys	Val	Cys	Val	Ser	Xaa	Thr	Ala	Tyr
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<210> 3707

<211> 585

<212> DNA

<213> Homo sapiens

<400> 3707

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<210> 3708

<211> 106

<212> PRT

<213> Homo sapiens

<400> 3708

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			20					25					30		
Glu	Asn	Ala	Phe	Asp	Asn	Ile	Gln	Leu	Pro	Tyr	Met	Ile	Lys	Thr	Leu
		35					40					45			
Lys	Lys	Leu	Gly	Ile	Glu	Gly	Met	Tyr	Leu	Asn	Val	Ile	Lys	Ala	Val
	50					55					60				
Tyr	Asp	Arg	Pro	Xaa	Val	Ser	Ile	Ile	Leu	Asn	Gly	Glu	Asn	Leu	Gln
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Glu	Leu	Gln	Thr	Phe	Gly	Leu	Arg	Ser	Gly	Thr	Gln	Gln	Gly	Cys	Pro
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Leu	Ser	Pro	Gln	Leu	Leu	Asn	Ile	Val	Leu						
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<210> 3709

<211> 3768

<212> DNA

<213> Homo sapiens

<400> 3709

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<210> 3710

<211> 70

<212> PRT

<213> Homo sapiens

<400> 3710

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Glu	Gln	Thr	Phe	Lys	Lys	Met	Glu	Asn	Tyr	Leu	Arg	His	Lys	Gln	Leu
			20				25					30			
Cys	Asp	Val	Ile	Leu	Val	Ala	Gly	Asp	Arg	Arg	Ile	Pro	Ala	His	Arg
		35					40				45				
Leu	Val	Leu	Ser	Ser	Val	Ser	Asp	Tyr	Phe	Ala	Ala	Met	Phe	Thr	Asn
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<210> 3711

<211> 1366

<212> DNA

<213> Homo sapiens

<400> 3711

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<210> 3712

<211> 368

<212> PRT

<213> Homo sapiens

<400> 3712

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			20					25					30		
Leu	Gly	Arg	Gly	Phe	Asn	Thr	Gly	Val	Ile	Leu	Leu	Arg	Leu	Asp	Arg
		35					40					45			
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	50					55					60				
Glu	Leu	Leu	Ser	Leu	Pro	Ala	Ala	Ser	Leu	Ala	Asp	Gln	Asp	Ile	Phe
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Asn	Ala	Val	Ile	Lys	Glu	His	Pro	Gly	Leu	Val	Gln	Arg	Leu	Pro	Cys
				85					90					95	
Val	Trp	Asn	Val	Gln	Leu	Ser	Asp	His	Thr	Leu	Ala	Glu	Arg	Cys	Tyr
			100					105					110		
Ser	Glu	Ala	Ser	Asp	Leu	Lys	Val	Ile	His	Trp	Asn	Ser	Pro	Lys	Lys
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Leu	Arg	Val	Lys	Asn	Lys	His	Val	Glu	Phe	Phe	Arg	Asn	Phe	Tyr	Leu
	130					135					140				
Thr	Phe	Leu	Glu	Tyr	Asp	Gly	Asn	Leu	Leu	Arg	Arg	Glu	Leu	Phe	Val
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Cys	Pro	Ser	Gln	Pro	Pro	Pro	Gly	Ala	Glu	Gln	Leu	Gln	Gln	Ala	Leu
			165						170					175	
Ala	Gln	Leu	Asp	Glu	Glu	Asp	Pro	Cys	Phe	Glu	Phe	Arg	Gln	Gln	Gln
			180					185					190		
Leu	Thr	Val	His	Arg	Val	His	Val	Thr	Phe	Leu	Pro	His	Glu	Pro	Pro
		195					200					205			
Pro	Pro	Arg	Pro	His	Asp	Val	Thr	Leu	Val	Ala	Gln	Leu	Ser	Met	Asp
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          260          265          270
His Val Val Tyr Arg Glu Gly Pro Leu Tyr Pro Val Asn Gln Leu Arg
          275          280          285
Asn Val Ala Leu Ala Gln Ala Leu Thr Pro Tyr Val Phe Leu Ser Asp
          290          295          300
Ile Asp Phe Leu Pro Ala Tyr Ser Leu Tyr Asp Tyr Leu Arg Ala Ser
305          310          315          320
Ile Glu Gln Leu Gly Leu Gly Ser Arg Arg Lys Ala Ala Leu Val Val
          325          330          335
Pro Ala Phe Glu Thr Leu Arg Tyr Arg Phe Ser Phe Pro His Ser Lys
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<210> 3713

<211> 1719

<212> DNA

<213> Homo sapiens

<400> 3713

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<210> 3714

<211> 488

<212> PRT

<213> Homo sapiens

<400> 3714

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			20					25					30		
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				85					90					95	
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			100					105					110		
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His Gln Ala Ser Asp Ser Glu Asn Glu Glu Pro Pro Lys Pro Arg Met
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Glu Ser Glu Glu Pro Pro Arg His Gln Ala Ser Asp Ser Glu Asn Glu
225          230          235          240
Glu Leu Pro Lys Pro Arg Ile Ser Asp Ser Glu Ser Glu Asp Pro Pro
          245          250          255
Arg His Gln Ala Ser Asp Ser Glu Asn Glu Glu Leu Pro Lys Pro Arg
          260          265          270
Ile Ser Asp Ser Glu Ser Glu Asp Pro Pro Arg Asn Gln Ala Ser Asp
          275          280          285
Ser Glu Asn Glu Glu Leu Pro Lys Pro Arg Val Ser Asp Ser Glu Ser
          290          295          300
Glu Gly Pro Gln Lys Gly Pro Ala Ser Asp Ser Glu Thr Glu Asp Ala
305          310          315          320
Ser Arg His Lys Gln Lys Pro Glu Ser Asp Asp Asp Ser Asp Arg Glu
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Asn Lys Gly Glu Asp Thr Glu Met Gln Asn Asp Ser Phe His Ser Asp
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Ser His Met Asp Arg Lys Lys Phe His Ser Ser Asp Ser Glu Glu Glu
          355          360          365
Glu His Lys Lys Gln Lys Met Asp Ser Asp Glu Asp Glu Lys Glu Gly
          370          375          380
Glu Glu Glu Lys Val Ala Lys Arg Lys Ala Ala Val Leu Ser Asp Ser
385          390          395          400
Glu Asp Glu Glu Lys Ala Ser Ala Lys Lys Ser Arg Val Val Ser Asp
          405          410          415
Ala Asp Asp Ser Asp Ser Asp Ala Val Ser Asp Lys Ser Gly Lys Arg
          420          425          430
Glu Lys Thr Ile Ala Ser Asp Ser Glu Glu Glu Ala Gly Lys Glu Leu
          435          440          445
Ser Asp Lys Lys Asn Glu Glu Lys Asp Leu Phe Gly Ser Asp Ser Glu
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<210> 3715

<211> 288

<212> DNA

<213> Homo sapiens

<400> 3715

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 Lys Ala His Lys Arg Tyr Leu Leu Met Ser Ile Asp Gln Arg Lys Lys
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<212> PRT

<213> Homo sapiens

<400> 3718

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Cys	Leu	Glu	Arg	Glu	Glu	Tyr	Leu	Leu	Phe	Asp	Ser	Asp	Lys	Leu	Ser
			35				40					45			
His	Leu	Ile	Leu	Asp	Ser	Ser	Ser	Lys	Ile	Cys	Asp	Leu	Asn	Ala	Asn
	50					55				60					
Thr	Glu	Ser	Glu	Val	Pro	Gly	Gly	Gln	Ser	Val	Gly	Val	Gln	Gly	Glu
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Ala	Ala	Cys	Val	Ser	Ile	Pro	His	Leu	Asp	Leu	Lys	Asn	Val	Ser	Asp
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Gly	Asp	Lys	Trp	Glu	Glu	Pro	Phe	Pro	Ala	Phe	Lys	Ser	Trp	Gln	Glu
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Asp	Ser	Glu	Ser	Gly	Glu	Ala	Gln	Leu	Ser	Pro	Gln	Ala	Gly	Arg	Met
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Asn	His	His	Pro	Leu	Glu	Glu	Asp	Cys	Pro	Pro	Val	Leu	Ser	His	Arg

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      165              170              175
Ser Phe Ser Ser Lys Asp Glu Lys Arg Glu Asp Arg Thr Pro Tyr Gln
      180              185              190
Leu Val Lys Lys Leu Gln Lys Lys Ile Arg Gln Phe Glu Glu Gln Phe
      195              200              205
Glu Arg Glu Arg Asn Ser Lys Pro Ser Tyr Ser Asp Ile Ala Ala Asn
      210              215              220
Pro Lys Val Leu Lys Trp Met Thr Glu Leu Thr Lys Leu Arg Lys Gln
225              230              235              240
Ile Lys Asp Ala Lys His Lys Asn Ser Asp Gly Glu Phe Val Pro Gln
      245              250              255
Thr Arg Pro Arg Ser Asn Thr Leu Pro Lys Ser Phe Gly Ser Ser Leu
      260              265              270
Asp His Glu Asp Glu Glu Asn Glu Asp Glu Pro Lys Val Ile Gln Lys
      275              280              285
Glu Lys Lys Pro Ser Lys Glu Ala Thr Leu Glu Leu Ile Leu Lys Arg
      290              295              300
Leu Lys Glu Lys Arg Ile Glu Arg Cys Leu Pro Glu Asp Ile Lys Lys
305              310              315              320
Met Thr Lys Asp His Leu Val Glu Glu Lys Ala Ser Leu Gln Lys Ser
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Leu Leu Tyr Tyr Glu Ser Gln His Gly Arg Pro Val Thr Lys Glu Glu
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<210> 3719

<211> 422

<212> DNA

<213> Homo sapiens

<400> 3719

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<210> 3720
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 35 40 45
 Val Cys Phe Asp Asp Phe Phe Pro Ile Ser Gln Val Arg Leu Trp Ala
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 Val Ala Tyr His Glu Gly Arg Glu Lys Arg His Arg Lys Lys Leu Tyr
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<210> 3721
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 <212> DNA
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<211> 1216

<212> PRT

<213> Homo sapiens

<400> 3722

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			20					25					30		
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			35				40					45			
Gln	Lys	Ile	Ser	Lys	Gln	Gln	Leu	Gln	Thr	Val	Lys	Asp	Arg	Phe	Gln
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Ala	Phe	Leu	Asn	Gly	Glu	Thr	Gln	Ile	Met	Ala	Asp	Glu	Ala	Phe	Met
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Asn	Ala	Val	Gln	Ser	Tyr	Tyr	Glu	Val	Phe	Leu	Lys	Ser	Asp	Arg	Val
				85					90					95	
Ala	Arg	Met	Val	Gln	Ser	Gly	Gly	Cys	Ser	Ala	Asn	Asp	Ser	Arg	Glu
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Val	Phe	Lys	Lys	His	Ile	Glu	Lys	Arg	Val	Arg	Ser	Leu	Pro	Glu	Ile
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Asp	Gly	Leu	Ser	Lys	Glu	Thr	Val	Leu	Ser	Ser	Trp	Met	Ala	Lys	Phe
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Asp	Ala	Ile	Tyr	Arg	Gly	Glu	Glu	Asp	Pro	Arg	Lys	Gln	Gln	Ala	Arg
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Leu	Leu	Tyr	Asn	Ala	Cys	Gln	Leu	Asp	Asn	Pro	Asp	Glu	Gln	Ala	Ala		
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Gln	Ile	Arg	Arg	Glu	Leu	Asp	Gly	Arg	Leu	Gln	Met	Ala	Asp	Gln	Ile		
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Leu	Lys	Arg	Ser	His	Asn	Ala	Ser	Ile	Ile	Asp	Met	Gly	Glu	Glu	Ser		
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Glu	Asn	Gln	Leu	Ser	Lys	Ser	Asp	Val	Val	Leu	Ser	Phe	Ser	Leu	Glu		
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Val	Arg	Met	Asp	Lys	Pro	Gln	Asn	Met	Lys	His	Ser	Gly	Tyr	Leu	Trp		
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			485					490						495			
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		500						505					510				
Gln	Asp	Arg	Ile	Leu	Trp	Val	Gln	Ala	Met	Tyr	Arg	Ala	Thr	Gly	Gln		
	515						520						525				
Ser	His	Lys	Pro	Val	Pro	Pro	Thr	Gln	Val	Gln	Lys	Leu	Asn	Ala	Lys		
	530					535					540						
Gly	Gly	Asn	Val	Pro	Gln	Leu	Asp	Ala	Pro	Ile	Ser	Gln	Phe	Ser	Gly		
545					550					555					560		
Leu	Lys	Asp	Ala	Asp	Arg	Ala	Gln	Lys	His	Gly	Met	Asp	Glu	Phe	Ile		
			565					570						575			
Ser	Ser	Asn	Pro	Cys	Asn	Phe	Asp	His	Ala	Ser	Leu	Phe	Glu	Met	Val		
		580						585					590				
Gln	Arg	Leu	Thr	Leu	Asp	His	Arg	Leu	Asn	Asp	Ser	Tyr	Ser	Cys	Leu		

	595					600					605				
Gly 610	Trp	Phe	Ser	Pro	Gly 615	Gln	Val	Phe	Val	Leu 620	Asp	Glu	Tyr	Cys	Ala
Arg 625	Asn	Gly	Val	Arg	Gly 630	Cys	His	Arg	His	Leu 635	Cys	Tyr	Leu	Arg	Asp 640
Leu	Leu	Glu	Arg	Ala 645	Glu	Asn	Gly	Ala	Met	Ile	Asp	Pro	Thr	Leu	Leu 655
His	Tyr	Ser	Phe 660	Ala	Phe	Cys	Ala	Ser	His	Val	His	Gly	Asn	Arg	Pro 670
Asp	Gly	Ile 675	Gly	Thr	Val	Thr	Val	Glu	Glu	Lys	Glu	Arg	Phe	Glu	Glu 685
Ile	Lys	Glu	Arg	Leu	Arg	Val 695	Leu	Leu	Glu	Asn	Gln	Ile	Thr	His	Phe 700
Arg 705	Tyr	Cys	Phe	Pro	Phe 710	Gly	Arg	Pro	Glu	Gly	Ala	Leu	Lys	Ala	Thr 720
Leu	Ser	Leu	Leu	Glu 725	Arg	Val	Leu	Met	Lys	Asp	Ile	Val	Thr	Pro	Val 735
Pro	Gln	Glu	Glu	Val 740	Lys	Thr	Val	Ile	Arg	Lys	Cys	Leu	Glu	Gln	Ala 750
Ala	Leu	Val	Asn	Tyr	Ser	Arg	Leu	Ser	Glu	Tyr	Ala	Lys	Ile	Glu	Glu 765
Asn	Gln	Lys	Asp	Ala	Glu	Asn 775	Val	Gly	Arg	Leu	Ile	Thr	Pro	Ala	Lys 780
Lys 785	Leu	Glu	Asp	Thr	Ile	Arg	Leu	Ala	Glu	Leu	Val	Ile	Glu	Val	Leu 800
Gln	Gln	Asn	Glu	Glu 805	His	His	Ala	Glu	Pro	His	Val	Asp	Lys	Gly	Glu 815
Ala	Phe	Ala	Trp	Trp	Ser	Asp	Leu	Met	Val	Glu	His	Ala	Glu	Thr	Phe 830
Leu	Ser	Leu	Phe	Ala	Val	Asp	Met	Asp	Ala	Ala	Leu	Glu	Val	Gln	Pro 845
Pro	Asp	Thr	Trp	Asp	Ser	Phe	Pro	Leu	Phe	Gln	Leu	Leu	Asn	Asp	Phe 860
Leu 865	Arg	Thr	Asp	Tyr	Asn	Leu	Cys	Asn	Gly	Lys	Phe	His	Lys	His	Leu 880
Gln	Asp	Leu	Phe	Ala 885	Pro	Leu	Val	Val	Arg	Tyr	Val	Asp	Leu	Met	Glu 895
Ser	Ser	Ile	Ala	Gln	Ser	Ile	His	Arg	Gly	Phe	Glu	Arg	Glu	Ser	Trp 910
Glu	Pro	Val	Asn	Asn	Gly	Ser	Gly	Thr	Ser	Glu	Asp	Leu	Phe	Trp	Lys 925
Leu	Asp	Ala	Leu	Gln	Thr	Phe	Ile	Arg	Asp	Leu	His	Trp	Pro	Glu	Glu 940
Glu 945	Phe	Gly	Lys	His	Leu	Glu	Gln	Arg	Leu	Lys	Leu	Met	Ala	Ser	Asp 960
Met	Ile	Glu	Ser	Cys	Val	Lys	Arg	Thr	Arg	Ile	Ala	Phe	Glu	Val	Lys 975
Leu	Gln	Lys	Thr	Ser	Arg	Ser	Thr	Asp	Phe	Arg	Val	Pro	Gln	Ser	Ile 990
Cys	Thr	Met	Phe	Asn	Val	Met	Val	Asp	Ala	Lys	Ala	Gln	Ser	Thr	Lys 1005
Leu	Cys	Ser	Met	Glu	Met	Gly	Gln	Glu	Phe	Ala	Lys	Met	Trp	His	Gln 1020
Tyr	His	Ser	Lys	Ile	Asp	Glu	Leu	Ile	Glu	Glu	Thr	Val	Lys	Glu	Met 1035

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 Ile Thr Leu Leu Val Ala Lys Phe Val Thr Ile Leu Glu Gly Val Leu
 1045 1050 1055
 Ala Lys Leu Ser Arg Tyr Asp Glu Gly Thr Leu Phe Ser Ser Phe Leu
 1060 1065 1070
 Ser Phe Thr Val Lys Ala Ala Ser Lys Tyr Val Asp Val Pro Lys Pro
 1075 1080 1085
 Gly Met Asp Val Ala Asp Ala Tyr Val Thr Phe Val Arg His Ser Gln
 1090 1095 1100
 Asp Val Leu Arg Asp Lys Val Asn Glu Glu Met Tyr Ile Glu Arg Leu
 1105 1110 1115 1120
 Phe Asp Gln Trp Tyr Asn Ser Ser Met Asn Val Ile Cys Thr Trp Leu
 1125 1130 1135
 Thr Asp Arg Met Asp Leu Gln Leu His Ile Tyr Gln Leu Lys Thr Leu
 1140 1145 1150
 Ile Arg Met Val Lys Lys Thr Tyr Arg Asp Phe Arg Leu Gln Gly Val
 1155 1160 1165
 Leu Asp Ser Thr Leu Asn Ser Lys Thr Tyr Glu Thr Ile Arg Asn Arg
 1170 1175 1180
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<210> 3723

<211> 830

<212> DNA

<213> Homo sapiens

<400> 3723

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 120
 aaccccaacg agaagctgaa ggtgaacttt gggaccccag agttcctgtc acctgaggtg
 180
 gtgaattatg accaaatctc cgataagaca gacatgtgga gtatgggggt gatcacctac
 240
 atgctgctga gcggcctctc ccccttctctg ggagatgatg acacagagac cctaaacaac
 300
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 360
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 420
 tgtctcgccc atccctggct caacaacctg gcggagaaaag ccaaacgctg taaccgacgc
 480
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 600
 ctgggggtct gagccctggg cgcagctgaa gcctggacgc agccacacag tggccggggc
 660
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 720

ggacaaggct gtgccaggct gggaggctcg gggctcccca cgcccccatg cagtgaccgc
780
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830

<210> 3724
<211> 203
<212> PRT
<213> Homo sapiens

<400> 3724
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Asp Phe Gly Leu Ala Arg Arg Tyr Asn Pro Asn Glu Lys Leu Lys Val
35 40 45
Asn Phe Gly Thr Pro Glu Phe Leu Ser Pro Glu Val Val Asn Tyr Asp
50 55 60
Gln Ile Ser Asp Lys Thr Asp Met Trp Ser Met Gly Val Ile Thr Tyr
65 70 75 80
Met Leu Leu Ser Gly Leu Ser Pro Phe Leu Gly Asp Asp Asp Thr Glu
85 90 95
Thr Leu Asn Asn Val Leu Ser Gly Asn Trp Tyr Phe Asp Glu Glu Thr
100 105 110
Phe Glu Ala Val Ser Asp Glu Ala Lys Asp Phe Val Ser Asn Leu Ile
115 120 125
Val Lys Asp Gln Arg Ala Arg Met Asn Ala Ala Gln Cys Leu Ala His
130 135 140
Pro Trp Leu Asn Asn Leu Ala Glu Lys Ala Lys Arg Cys Asn Arg Arg
145 150 155 160
Leu Lys Ser Gln Ile Leu Leu Lys Lys Tyr Leu Met Lys Arg Arg Trp
165 170 175
Lys Lys Asn Phe Ile Ala Val Ser Ala Ala Asn Arg Phe Lys Lys Ile
180 185 190
Ser Ser Ser Gly Ala Leu Met Ala Leu Gly Val
195 200

<210> 3725
<211> 1244
<212> DNA
<213> Homo sapiens

<400> 3725
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120
gaccatcttc acttttgttt tcaggccttt aaaattgtgc cctacaacac agagaccctt
180
gataaactgc taaccgaatc cctgaagaac aatatccctg caagcggact gcacctcttt
240
ggaatcaacc agctggaaga agaagatatg atgacaaatc agagggatga agagctgccc
300

accctgttgc attttgctgc gaagtatgga ctgaagaacc tcaactgcctt gttgctcacc
 360
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 420
 atcgctgaga aacacggctt cagggacctg cggcagttca tgcacgagta tgtggaaacg
 480
 gtggacatgc tcaagagtca cattaagag gaactgatgc acggggagga ggctgatgct
 540
 gtgtacgagt ccatggccca cctttccaca gacctgctta tgaaatgctc gctcaacccc
 600
 ggctgtgacg aggatctcta tgagtccatg gctgcctttg tcccagctgc cactgaagac
 660
 ctctatgttg aaatgcttca ggccagtaca tctaaccctaa tccctggaga tggtttctct
 720
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 780
 aatctggaga gagatcagtg ccatcttggg caggaagaag atgtttatca cacggtggat
 840
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 900
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 960
 aagtatggca gggaatgatg tccaactggt tctttggagc ttctcaacag ggatttctctg
 1020
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 1140
 gaccagagtc agtgctggcc ttcttggaag tatttacgca cagttgcaaa ggcaggtaaa
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<210> 3726

<211> 325

<212> PRT

<213> Homo sapiens

<400> 3726

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		20						25					30		
Gly	Arg	Glu	Leu	Asp	Phe	Arg	Ser	Asp	His	Leu	His	Phe	Cys	Phe	Gln
		35					40					45			
Ala	Phe	Lys	Ile	Val	Pro	Tyr	Asn	Thr	Glu	Thr	Leu	Asp	Lys	Leu	Leu
		50				55					60				
Thr	Glu	Ser	Leu	Lys	Asn	Asn	Ile	Pro	Ala	Ser	Gly	Leu	His	Leu	Phe
					70					75				80	
Gly	Ile	Asn	Gln	Leu	Glu	Glu	Glu	Asp	Met	Met	Thr	Asn	Gln	Arg	Asp
			85					90						95	
Glu	Glu	Leu	Pro	Thr	Leu	Leu	His	Phe	Ala	Ala	Lys	Tyr	Gly	Leu	Lys
			100					105					110		
Asn	Leu	Thr	Ala	Leu	Leu	Leu	Thr	Cys	Pro	Gly	Ala	Leu	Gln	Ala	Tyr

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      115              120              125
Ser Val Ala Asn Lys His Gly His Tyr Pro Asn Thr Ile Ala Glu Lys
      130              135              140
His Gly Phe Arg Asp Leu Arg Gln Phe Ile Asp Glu Tyr Val Glu Thr
      145              150              155              160
Val Asp Met Leu Lys Ser His Ile Lys Glu Glu Leu Met His Gly Glu
      165              170              175
Glu Ala Asp Ala Val Tyr Glu Ser Met Ala His Leu Ser Thr Asp Leu
      180              185              190
Leu Met Lys Cys Ser Leu Asn Pro Gly Cys Asp Glu Asp Leu Tyr Glu
      195              200              205
Ser Met Ala Ala Phe Val Pro Ala Ala Thr Glu Asp Leu Tyr Val Glu
      210              215              220
Met Leu Gln Ala Ser Thr Ser Asn Pro Ile Pro Gly Asp Gly Phe Ser
      225              230              235              240
Arg Ala Thr Lys Asp Ser Met Ile Arg Lys Phe Leu Glu Gly Asn Ser
      245              250              255
Met Gly Met Thr Asn Leu Glu Arg Asp Gln Cys His Leu Gly Gln Glu
      260              265              270
Glu Asp Val Tyr His Thr Val Asp Asp Asp Glu Ala Phe Ser Val Asp
      275              280              285
Leu Ala Ser Arg Pro Pro Val Pro Val Pro Arg Pro Glu Thr Thr Ala
      290              295              300
Pro Gly Ala His Gln Leu Pro Asp Asn Glu Pro Tyr Ile Phe Lys Gly
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Lys Tyr Gly Arg Glu
      325

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<210> 3727

<211> 630

<212> DNA

<213> Homo sapiens

<400> 3727

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120
ctcgaccccg ctgagaaaca agaaacaggc tgcctcctt tgggtctgga gtcctgcga
180
gtttcagata gccggcttga ggcattccagc agccagtcct ttggtcttgg accacaccga
240
ggacggctca acattcagtc aggcctggag gacggcgatc tatatgatgg agcctgggtgt
300
gctgaggagc aggacgccga tccatgggtt caggtggacg ctgggcaccc caccgcttc
360
tcgggtgtta tcacacaggg caggaactct gtctggaggt atgactgggt cacatcatatc
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600

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630

<210> 3728

<211> 210

<212> PRT

<213> Homo sapiens

<400> 3728

Arg	Ile	Arg	Val	Ile	Lys	Lys	Lys	Lys	Val	Ile	Met	Lys	Lys	Arg	Lys
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Lys	Leu	Thr	Leu	Thr	Arg	Pro	Thr	Pro	Leu	Val	Thr	Ala	Gly	Pro	Leu
			20					25					30		
Val	Thr	Pro	Thr	Pro	Ala	Gly	Thr	Leu	Asp	Pro	Ala	Glu	Lys	Gln	Glu
		35					40					45			
Thr	Gly	Cys	Pro	Pro	Leu	Gly	Leu	Glu	Ser	Leu	Arg	Val	Ser	Asp	Ser
	50					55					60				
Arg	Leu	Glu	Ala	Ser	Ser	Ser	Gln	Ser	Phe	Gly	Leu	Gly	Pro	His	Arg
65					70				75					80	
Gly	Arg	Leu	Asn	Ile	Gln	Ser	Gly	Leu	Glu	Asp	Gly	Asp	Leu	Tyr	Asp
			85					90					95		
Gly	Ala	Trp	Cys	Ala	Glu	Glu	Gln	Asp	Ala	Asp	Pro	Trp	Phe	Gln	Val
			100					105					110		
Asp	Ala	Gly	His	Pro	Thr	Arg	Phe	Ser	Gly	Val	Ile	Thr	Gln	Gly	Arg
	115						120					125			
Asn	Ser	Val	Trp	Arg	Tyr	Asp	Trp	Val	Thr	Ser	Tyr	Lys	Val	Gln	Phe
	130					135					140				
Ser	Asn	Asp	Ser	Arg	Thr	Trp	Trp	Gly	Ser	Arg	Asn	His	Ser	Ser	Gly
145					150				155					160	
Met	Asp	Ala	Val	Phe	Pro	Ala	Asn	Ser	Asp	Pro	Glu	Thr	Pro	Val	Leu
			165						170					175	
Asn	Leu	Leu	Pro	Glu	Pro	Gln	Val	Ala	Arg	Phe	Ile	Arg	Leu	Leu	Pro
			180					185					190		
Gln	Thr	Trp	Leu	Gln	Gly	Gly	Ala	Pro	Cys	Leu	Arg	Ala	Glu	Ile	Leu
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Ala	Cys														
	210														

<210> 3729

<211> 1552

<212> DNA

<213> Homo sapiens

<400> 3729

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120
atcaagttat cagcagatgt caaaccattt gtccccagat ttgccgggct caatgtggca
180
tggttagagt cctcagaagc atgtgtcttc cccagctctg cagccacata ctatccgttt
240
gttcaggaac caccagtgc agagcagaaa atatatactg aagacatggc ctttggagct
300

tcaacttttc cacctcagta tttatcttct gagataactc ttcattccata tgcctattct
 360
 ccttataccc ttgactccac acagaatggt tactcagtgc ctggctccca gtatctttat
 420
 aaccaaccca gttgttaccg aggttttcaa acagtgaagc atcgaaatga gaacacatgc
 480
 cctctcccac aagaaatgaa agctctgttt aagaagaaaa cctatgatga gaaaaaacg
 540
 tatgatcagc aaaagtttga cagtgaagg gctgatggaa ctatatcatc tgagataaaa
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 660
 taccataagc gaacagacag gaaatccaga atcattgcaa aaaatgtatc tacctccaaa
 720
 cctgagtttg aatttaccac actggacttt cctgaactgc aagggtgcaga gaacaatatg
 780
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 840
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 960
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 1200
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 1260
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 1320
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 1440
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<210> 3730

<211> 422

<212> PRT

<213> Homo sapiens

<400> 3730

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 20 25 30
 Gln Asn Val Tyr Ser Val Pro Gly Ser Gln Tyr Leu Tyr Asn Gln Pro

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Ser Cys Tyr Arg Gly Phe Gln Thr Val Lys His Arg Asn Glu Asn Thr
  50      55      60
Cys Pro Leu Pro Gln Glu Met Lys Ala Leu Phe Lys Lys Lys Thr Tyr
  65      70      75      80
Asp Glu Lys Lys Thr Tyr Asp Gln Gln Lys Phe Asp Ser Glu Arg Ala
      85      90      95
Asp Gly Thr Ile Ser Ser Glu Ile Lys Ser Ala Arg Gly Ser His His
      100      105      110
Leu Ser Ile Tyr Ala Glu Asn Ser Leu Lys Ser Asp Gly Tyr His Lys
      115      120      125
Arg Thr Asp Arg Lys Ser Arg Ile Ile Ala Lys Asn Val Ser Thr Ser
      130      135      140
Lys Pro Glu Phe Glu Phe Thr Thr Leu Asp Phe Pro Glu Leu Gln Gly
      145      150      155      160
Ala Glu Asn Asn Met Ser Glu Ile Gln Lys Gln Pro Lys Trp Gly Pro
      165      170      175
Val His Ser Val Ser Thr Asp Ile Ser Leu Leu Arg Glu Val Val Lys
      180      185      190
Pro Ala Ala Val Leu Ser Lys Gly Glu Ile Val Val Lys Asn Asn Pro
      195      200      205
Asn Glu Ser Val Thr Ala Asn Ala Ala Thr Asn Ser Pro Ser Cys Thr
      210      215      220
Arg Glu Leu Ser Trp Thr Pro Met Gly Tyr Val Val Arg Gln Thr Leu
      225      230      235      240
Ser Thr Glu Leu Ser Ala Ala Pro Lys Asn Val Thr Ser Met Ile Asn
      245      250      255
Leu Lys Thr Ile Ala Ser Ser Ala Asp Pro Lys Asn Val Ser Ile Pro
      260      265      270
Ser Ser Glu Ala Leu Ser Ser Asp Pro Ser Tyr Asn Lys Glu Lys His
      275      280      285
Ile Ile His Pro Thr Gln Lys Ser Lys Ala Ser Gln Gly Ser Asp Leu
      290      295      300
Glu Gln Asn Glu Ala Ser Arg Lys Asn Lys Lys Lys Lys Glu Lys Ser
      305      310      315      320
Thr Ser Lys Tyr Glu Val Leu Thr Val Gln Glu Pro Pro Arg Ile Glu
      325      330      335
Asp Ala Glu Glu Phe Pro Asn Leu Ala Val Ala Ser Glu Arg Arg Asp
      340      345      350
Arg Ile Glu Thr Pro Lys Phe Gln Ser Lys Gln Gln Pro Gln Asp Asn
      355      360      365
Phe Lys Asn Asn Val Lys Lys Ser Gln Leu Pro Val Gln Leu Asp Leu
      370      375      380
Gly Gly Met Leu Thr Ala Leu Glu Lys Lys Gln His Ser Gln His Ala
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Lys Gln Ser Ser Lys Pro Val Val Val Ser Val Gly Ala Val Pro Val
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<210> 3731

<211> 1704

<212> DNA

<213> Homo sapiens

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120
tgtgcagtgc tgctcccagc atcactgttc gtcaatagtc acccaggaat agaccggcct
180
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240
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360
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420
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480
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720
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780
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840
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1200
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1320
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1440
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1500
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1560

attcaagggc ccggcggtcaa aggaaattgg ttttgacttt ttgtaatcta ggagcgacag
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 1680
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 1704

<210> 3732
 <211> 281
 <212> PRT
 <213> Homo sapiens

<400> 3732
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 Cys Trp Ala Ser Leu Asn Gln Leu Asp Ser His Val Leu Leu Cys Phe
 20 25 30
 Glu Gly Ile Thr Asp Ala Ser Ser Cys Ala Val Leu Leu Pro Ala Ser
 35 40 45
 Leu Phe Val Asn Ser His Pro Gly Ile Asp Arg Pro Gly Met Leu Cys
 50 55 60
 Ser Phe Arg Ile Pro Gly Ala Trp Ser Cys Ala Trp Ser Leu Asn Ile
 65 70 75 80
 Gln Ala Asn Asn Cys Phe Ser Thr Gly Leu Ser Arg Arg Val Leu Leu
 85 90 95
 Thr Asn Val Val Thr Gly His Arg Gln Ser Phe Gly Thr Asn Ser Asp
 100 105 110
 Val Leu Ala Gln Gln Phe Ala Leu Met Ala Pro Leu Leu Phe Asn Gly
 115 120 125
 Cys Arg Ser Gly Glu Ile Phe Ala Ile Asp Leu Arg Cys Gly Asn Gln
 130 135 140
 Gly Lys Gly Trp Lys Ala Thr Arg Leu Phe His Asp Ser Ala Val Thr
 145 150 155 160
 Ser Val Arg Ile Leu Gln Asp Glu Gln Tyr Leu Met Ala Ser Asp Met
 165 170 175
 Ala Gly Lys Ile Lys Leu Trp Asp Leu Arg Thr Thr Lys Cys Val Arg
 180 185 190
 Gln Tyr Glu Gly His Val Asn Glu Tyr Ala Tyr Leu Pro Leu His Val
 195 200 205
 His Glu Glu Glu Gly Ile Leu Val Ala Val Gly Gln Asp Cys Tyr Thr
 210 215 220
 Arg Ile Trp Ser Leu His Asp Ala Arg Leu Leu Arg Thr Ile Pro Ser
 225 230 235 240
 Pro Tyr Pro Ala Ser Lys Ala Asp Ile Pro Ser Val Ala Phe Ser Ser
 245 250 255
 Arg Leu Gly Gly Ser Arg Gly Ala Pro Gly Leu Leu Met Ala Val Gly
 260 265 270
 Gln Asp Leu Tyr Cys Tyr Ser Tyr Ser
 275 280

<210> 3733
 <211> 515
 <212> DNA
 <213> Homo sapiens

<400> 3733

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 120
 tcctcagtgc gggagaggga gacgccgggg gcangtccat gcctcccgcg gcgtgggtgg
 180
 tgcgtcccag gtgacgtcag aagcagcccc cccctgcctg gatggtgcgc cctgagtac
 240
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 300
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<210> 3734

<211> 171

<212> PRT

<213> Homo sapiens

<400> 3734

Xaa	Gly	Arg	Ala	Val	Arg	Arg	Val	Thr	Ala	Gly	Thr	Arg	Pro	Gly	Trp	1	5	10	15
Val	Ser	Gly	Ser	Arg	Tyr	Arg	Arg	Gly	Arg	Arg	Arg	Gly	Arg	Leu	Lys	20	25	30	
Gly	Lys	Asp	Pro	Gly	Ser	Ala	Pro	Ser	Ser	Val	Arg	Glu	Arg	Glu	Thr	35	40	45	
Pro	Gly	Ala	Xaa	Pro	Cys	Leu	Pro	Arg	Arg	Gly	Trp	Cys	Val	Pro	Gly	50	55	60	
Asp	Val	Arg	Ser	Ser	Pro	Pro	Leu	Pro	Gly	Trp	Cys	Ala	Leu	Ser	Asp	65	70	75	80
Val	Arg	Ser	Arg	Gly	Arg	Ser	Cys	Pro	Ser	Ala	Pro	Lys	Ala	Ala	Gly	85	90	95	
Gly	Leu	Arg	Ala	Trp	Gly	Arg	Gly	Ser	Gly	Ala	Ala	Arg	Ala	Pro	Ala	100	105	110	
Pro	Ala	Pro	Ser	Pro	Ser	Ser	Gly	Xaa	Ser	Pro	Ser	Ser	Arg	Thr	Pro	115	120	125	
Arg	Asp	Trp	Ser	Ala	Ser	Arg	Cys	Trp	Thr	Trp	Ser	Gly	Ala	Ala	Thr	130	135	140	
Ala	Pro	Thr	Pro	Phe	Ser	Pro	Ala	Gln	Gln	Pro	Pro	Ser	Ser	His	Asp	145	150	155	160
Gly	Leu	Ser	Leu	Asp	Pro	Ser	Gln	Leu	Glu	Pro						165	170		

<210> 3735

<211> 2512

<212> DNA

<213> Homo sapiens

<400> 3735
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120
tgatcactga acccatccct gacatccgaa accagtatcc agagcacata agcaacatca
180
tctccctcct ccaggacctt gtaagtgtct tccctgccag ctctgtgcag gaaacttcca
240
tgctggtttc cctcctgcc aacctcttta atgctctgag agcctctggt gttgacatag
300
aagaggaaac ggagaagaac ctggaaaagg tacagactat cattgaacat ctgcaggaaa
360
agaggcgaga gggcactttg agagtggata cctacactct agtgcagcct gaggcagaag
420
accatgttga gagctaccga accatgcccc tttaccctac ctacaatgaa gtgcacttgg
480
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540
atctggatac ccacttccgg ctctcgcgag aagatttcgt cagaccttta cgggaaggta
600
ttttggaact tctccaaagc tttgaagacc agggcctgag gaagagaaaag tttgatgaca
660
tccgaatcta ctttgacacc aggattatca ccccatgtg ttcacatca ggcatagtct
720
acaaggtgca gtttgacaca aaaccactga agtttgttcg ctggcagaat tccaaacgat
780
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840
ccgtatctaa caggggagcag gaagatctct gccgaggaat tgtccagctc tgcttcaatg
900
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960
caactgcata ctttgaggcc tacaggcacg tcttggaagg actccaggag gtccaggagg
1020
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1080
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1140
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1260
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1320
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1380
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1440
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1500
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1560

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 1680
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 1740
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 1920
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 1980
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 2040
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 2100
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 2160
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 2340
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 2400
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<210> 3736

<211> 155

<212> PRT

<213> Homo sapiens

<400> 3736

Thr	Ile	Val	Ala	Leu	Gly	Gln	Gln	Leu	Asp	Arg	Ser	Lys	Pro	Gln	Glu
1				5				10						15	
Ser	Gly	Arg	Pro	Ser	Ala	Thr	Gln	Lys	Lys	Lys	Met	Lys	Lys	Arg	Val
			20					25					30		
Lys	Asp	Glu	Leu	Arg	Lys	Leu	Asn	Thr	Met	Pro	Ala	Ala	Glu	Ala	Asn
			35				40					45			
Glu	Ile	Glu	Asp	Val	Trp	His	Leu	Asp	Leu	Ser	Ser	Arg	Trp	Gln	Leu
			50			55					60				
Tyr	Arg	Leu	Trp	Leu	Gln	Leu	Tyr	Gln	Ala	Asp	Thr	Pro	Pro	Gly	Lys
65					70					75				80	
Ile	Leu	Ser	Tyr	Glu	Arg	Gln	Tyr	Arg	Thr	Ser	Ala	Glu	Arg	Met	Ala
				85					90					95	
Glu	Leu	Arg	Leu	Gln	Glu	Asp	Leu	His	Ile	Leu	Lys	Asp	Ala	Gln	Val
			100					105					110		
Val	Gly	Met	Thr	Thr	Thr	Gly	Ala	Ala	Lys	Tyr	Arg	Gln	Ile	Leu	Gln

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<210> 3737
<211> 1046
<212> DNA
<213> Homo sapiens
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<210> 3738
<211> 348
<212> PRT
<213> Homo sapiens
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<400> 3738

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Cys Val Cys Tyr Asn Glu Pro Lys Val Thr Thr Ser Cys Pro Gln Gln
 20          25          30
Gly Leu Gln Ala Val Pro Val Gly Ile Pro Ala Ala Ser Gln Arg Ile
 35          40          45
Phe Leu His Gly Asn Arg Ile Ser His Val Pro Ala Ala Ser Phe Arg
 50          55          60
Ala Cys Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Val Leu Ala
 65          70          75          80
Arg Ile Asp Ala Ala Phe Thr Gly Leu Ala Leu Leu Gly Ala Leu
 85          90          95
Asp Leu Ser Asp Asn Ala Gln Leu Arg Ser Val Asp Pro Ala Thr Phe
100          105          110
His Gly Leu Gly Arg Leu His Thr Leu His Leu Asp Arg Cys Gly Leu
115          120          125
Gln Glu Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr
130          135          140
Leu Tyr Leu Gln Asp Asn Ala Leu Gln Ala Leu Pro Asp Asp Thr Phe
145          150          155          160
Arg Asp Leu Gly Asn Leu Thr His Leu Phe Leu His Gly Asn Arg Ile
165          170          175
Ser Ser Val Pro Glu Arg Ala Phe Arg Gly Leu His Ser Leu Asp Arg
180          185          190
Leu Leu Leu His Gln Asn Arg Val Ala His Val His Pro His Ala Phe
195          200          205
Arg Asp Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu
210          215          220
Ser Ala Leu Pro Thr Glu Ala Leu Ala Pro Leu Arg Ala Leu Gln Tyr
225          230          235          240
Leu Arg Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro
245          250          255
Leu Trp Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Glu Val Pro
260          265          270
Cys Ser Leu Pro Gln Arg Leu Ala Gly Arg Asp Leu Lys Arg Leu Ala
275          280          285
Ala Asn Asp Leu Gln Gly Cys Ala Val Ala Thr Gly Pro Tyr His Pro
290          295          300
Ile Trp Thr Gly Arg Ala Thr Asp Glu Glu Pro Leu Gly Leu Pro Lys
305          310          315          320
Cys Cys Gln Pro Asp Ala Ala Asp Lys Ala Ser Val Leu Glu Pro Gly
325          330          335
Arg Pro Ala Ser Ala Gly Asn Ala Leu Lys Gly Arg
340          345

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<210> 3739

<211> 1252

<212> DNA

<213> Homo sapiens

<400> 3739

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tcataccttat cttcgatcatt ttctgggctg agcttttttg acaaggtgct gtgccagtct
60

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 120
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 180
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 240
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 300
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 360
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 420
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 480
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 540
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 600
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 660
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 720
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 780
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 900
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 960
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 1020
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 1080
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 1200
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 1252

<210> 3740

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3740

Met Gly Lys Phe Leu His Gln Gly Leu Gly Glu Ser Thr Gly Ser Pro
 1 5 10 15
 Gly Gln Trp Glu Ser Ala Ala Pro Pro Val Trp Arg Pro Arg Ala His
 20 25 30
 Ser Thr Glu Ala Pro Gly His Pro Gln Glu Asp Gly Lys Gly Gln Leu
 35 40 45
 Ala Gly Glu Ser Pro Gly His Arg Glu Pro Ser Pro Gly Ser Lys Gln

```

      50              55              60
Asp Leu Pro Ser Asp Cys Leu Arg Asn Ala Gly Trp Thr Ser Arg Asn
65              70              75              80
Phe Pro Phe Thr Gly Gln Pro Ala Ala Ala Pro Pro Arg Leu Gly Pro
      85              90              95
Ala Pro Gly Ala Ala Asp Arg Pro Ser Arg Val Pro Lys Ser Pro Ala
      100              105              110
Leu Ala Gln Lys Leu Gly Gln Pro Arg Asp Pro His Leu Pro Leu Pro
      115              120              125
Ile Ser Pro Leu Ser Gln Pro Pro Ser Pro
      130              135

```

<210> 3741

<211> 562

<212> DNA

<213> Homo sapiens

<400> 3741

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gtcgtgtcca ctgtggggat ccacgtcctg actaaccttg tgttcctaga aatccctcac
120
cggcagatcg gtgcctcctg aatcccaccc aaaattccca ctgggaatgt gttcctgaaa
180
gagctgcccc ggcttgagaa agcctctttt cagaccaaac ttcgtattca aagctcaaaa
240
agaactgcac acaattagga cagtcataca agatgctgcc cctaatactg ccacaatctg
300
cgagaaggga ggcggggctt ccgagggcaa agtgcccctg ggaagggatc cgcagggaac
360
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420
ctctgcgctc gcacacggga ttcattctcg ccgctctg ccgtttccag caacacggag
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540
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562

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<210> 3742

<211> 138

<212> PRT

<213> Homo sapiens

<400> 3742

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Met Gly Trp Arg Asn Cys Phe Arg Leu Ala Pro Cys Cys Trp Lys Arg
  1              5              10              15
Ala Glu Ala Ala Glu Met Asn Pro Val Cys Glu Arg Arg Ala Leu Ser
      20              25              30
Pro Ala Arg Ala Cys Ser Pro Arg Gly Trp Gly Leu Trp Ser Phe Gln
      35              40              45
Ser Cys Ser Leu Arg Ile Pro Ser Gln Gly His Phe Ala Leu Gly Ser
      50              55              60
Pro Ala Ser Leu Leu Ala Asp Cys Gly Arg Ile Arg Gly Ser Ile Leu

```



```

65              70              75              80
Tyr Asp Cys Pro Asn Cys Val Gln Phe Phe Leu Ser Phe Glu Tyr Glu
              85              90              95
Val Trp Ser Glu Lys Arg Leu Ser Gln Ala Trp Ala Ala Leu Ser Gly
              100              105              110
Thr His Ser Gln Trp Glu Phe Trp Val Gly Phe Arg Arg His Arg Ser
              115              120              125
Ala Gly Glu Gly Phe Leu Gly Thr Gln Gly
              130              135

```

<210> 3743

<211> 468

<212> DNA

<213> Homo sapiens

<400> 3743

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nntcatgagc cttcttataca gctccatttt ggcaaggcgc tgacaatggc ggaggctgaa
60
ggcaatgcaa gctgcacagt cagtctaggg ggtgccaata tggcagagac ccacaaagcc
120
atgatcctgc aactcaatcc cagtgagaac tgcacctgga caatagaaag accagaaaac
180
aaaagcatca gaattatctt ttcctatgtc cagcttgatc cagatggaag ctgtgaaagt
240
gaaaacatta aagtctttga cggaacctcc agcaatgggc ctctgctagg gcaagtctgc
300
agtaaaaaacg actatgttcc tgtatttgaa tcatcatcca gtacattgac gtttcaaata
360
gttactgact cagcaagaat tcaaagaact gtctttgtgt tctagtagtt cttatttcct
420
aacatcttta ttccaaagtg tggcggttac ctggatccct ggaaggat
468

```

<210> 3744

<211> 134

<212> PRT

<213> Homo sapiens

<400> 3744

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Xaa His Glu Pro Ser Tyr Lys Leu His Phe Gly Lys Ala Leu Thr Met
1              5              10              15
Ala Glu Ala Glu Gly Asn Ala Ser Cys Thr Val Ser Leu Gly Gly Ala
20              25              30
Asn Met Ala Glu Thr His Lys Ala Met Ile Leu Gln Leu Asn Pro Ser
35              40              45
Glu Asn Cys Thr Trp Thr Ile Glu Arg Pro Glu Asn Lys Ser Ile Arg
50              55              60
Ile Ile Phe Ser Tyr Val Gln Leu Asp Pro Asp Gly Ser Cys Glu Ser
65              70              75              80
Glu Asn Ile Lys Val Phe Asp Gly Thr Ser Ser Asn Gly Pro Leu Leu
85              90              95
Gly Gln Val Cys Ser Lys Asn Asp Tyr Val Pro Val Phe Glu Ser Ser
100              105              110
Ser Ser Thr Leu Thr Phe Gln Ile Val Thr Asp Ser Ala Arg Ile Gln

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115
Arg Thr Val Phe Val Phe
130

120

125

<210> 3745

<211> 345

<212> DNA

<213> Homo sapiens

<400> 3745

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120
ccgtgaacac gtctcccccg gccgctccct ggttccatgc gtgctcgtct tgggcaccac
180
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300
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345

<210> 3746

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3746

Met Ala Gly Trp Cys Val Tyr Gly Thr Leu Trp Glu Arg Lys Thr Ala
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Thr Cys Gly Leu Ala Ala Trp Arg Arg His Met Ser Arg Glu His Val
20 25 30
Ser Pro Gly Arg Ser Leu Val Pro Cys Val Leu Val Leu Gly Thr Thr
35 40 45
Arg Thr Gln Pro Cys Ser Pro Arg Ser Cys Ser His Ser His Gly Ile
50 55 60
Ala Trp Ser Asp Ala Ala Ser Ala Pro Asp Ala Ser Arg Cys Arg Cys
65 70 75 80
Gln Ala Cys Gln Ala Lys Pro Arg Phe Ser Gly Ala Ala Gly Gly Gly
85 90 95
Arg His Val Trp Ala Asp
100

<210> 3747

<211> 800

<212> DNA

<213> Homo sapiens

<400> 3747

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120

aagggggcgc gcccggccac tttctgcctg agccccgcac cctctctggt ggtctctct
180
ggggcgcccc tgccaatccc cgcttcccc tcccgcatat gcagatgcgc ttcgatggac
240
gcctgggctt ccccggcgga ttcgtggaca cgcaggacag aagcctagag gacgggctga
300
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360
actaccgcag ctcccacgtc ggggtcaggg ccacgcgttg tggccactt ctatgccaa
420
cgtctgacgc tcgaggagct gttggctgtg gaggccggcg caacacgcgc caaggaccac
480
gggctggagg tgggaccagc ctgggactct gtccctttcc caatttctc ttctcccaaa
540
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600
tctcccagc tttcttggtg gagttgggat cgtgatcatc tatactctga attagtactg
660
ccaacctggg ctttctgtaa aggtctttcc caccctttac caggagagat cctttctaga
720
acacactcat ccattgtctc ctgctgttcc ctattgacag tgtgatagat tatcacatta
780
tctaggtgtg gcaacctagg
800

<210> 3748

<211> 138

<212> PRT

<213> Homo sapiens

<400> 3748

Met	Gln	Met	Arg	Phe	Asp	Gly	Arg	Leu	Gly	Phe	Pro	Gly	Gly	Phe	Val
1				5					10					15	
Asp	Thr	Gln	Asp	Arg	Ser	Leu	Glu	Asp	Gly	Leu	Asn	Arg	Glu	Leu	Arg
			20					25					30		
Glu	Glu	Leu	Gly	Glu	Ala	Ala	Ala	Ala	Phe	Arg	Val	Glu	Arg	Thr	Asp
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Tyr	Arg	Ser	Ser	His	Val	Gly	Val	Arg	Ala	Thr	Arg	Cys	Gly	Pro	Leu
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Leu	Cys	Gln	Ala	Ser	Asp	Ala	Arg	Gly	Ala	Val	Gly	Cys	Gly	Gly	Arg
65					70					75				80	
Arg	Asn	Thr	Arg	Gln	Gly	Pro	Arg	Ala	Gly	Gly	Gly	Thr	Ser	Leu	Gly
				85					90					95	
Leu	Cys	Pro	Phe	Pro	Asn	Phe	Leu	Phe	Ser	Gln	Ser	Phe	Leu	Ser	Pro
			100					105					110		
Lys	Lys	Ala	Ser	Leu	Glu	Lys	Ser	Leu	Cys	Pro	Ser	Asp	Leu	Ala	Leu
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<210> 3749

<211> 648

<212> DNA

<213> Homo sapiens

<400> 3749

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<210> 3750

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3750

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Trp	Ala	Ala	Ser	Pro	Gln	Gln	His	Glu	Trp	Pro	Pro	Leu	Leu	Gln	Leu
			20					25					30		
Arg	Pro	Glu	Asp	Val	Gly	Phe	Asp	Gly	Tyr	Ser	Met	Pro	Arg	Glu	Gly
		35				40					45				
Ser	Thr	Ser	Lys	Gln	Met	Pro	Pro	Ser	Asp	Ala	Glu	Gly	Asp	Pro	Leu
	50				55					60					
Met	Asn	Met	Leu	Met	Arg	Leu	Gln	Glu	Ala	Ala	Asn	Tyr	Ser	Ser	Pro
65				70					75					80	
Gln	Ser	Tyr	Asp	Ser	Asp	Ser	Asn	Ser	Asn	Ser	His	His	Asp	Asp	Ile
			85				90						95		
Leu	Asp	Ser	Ser	Leu	Glu	Ser	Thr	Leu							
			100					105							

<210> 3751

<211> 554

<212> DNA

<213> Homo sapiens

<400> 3751

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<210> 3752

<211> 66

<212> PRT

<213> Homo sapiens

<400> 3752

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Pro	His	His	Gly	Pro	Gly	Pro	Ala	Ala	Ala	Arg	Gly	Ser	Val	Ala	Pro
			20				25						30		
Ser	Gly	Ala	Lys	Gly	Val	Ser	Tyr	Thr	Gln	Gly	Gln	Ser	Pro	Glu	Pro
		35				40					45				
Arg	Thr	Arg	Glu	Val	Phe	Leu	Leu	Arg	Gly	Pro	Pro	Gly	Pro	Ala	Phe
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Pro	Gly														
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<210> 3753

<211> 1426

<212> DNA

<213> Homo sapiens

<400> 3753

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 360

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<210> 3754

<211> 261

<212> PRT

<213> Homo sapiens

<400> 3754

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Ser	Ala	Thr	Glu	Ser	Leu	Pro	Thr	Leu	Glu	Leu	Leu	Ser	Gln	Val	Asp
			20					25					30		
Met	Asp	Cys	Arg	Val	His	Met	Arg	Pro	Ile	Gly	Leu	Thr	Trp	Val	Leu
		35				40					45				
Gln	Leu	Thr	Leu	Ala	Trp	Ile	Leu	Leu	Glu	Ala	Cys	Gly	Gly	Ser	Arg
	50				55					60					
Pro	Leu	Gln	Ala	Arg	Ser	Gln	Gln	His	His	Gly	Leu	Ala	Ala	Asp	Leu
65				70						75				80	
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<210> 3755

<211> 3149

<212> DNA

<213> Homo sapiens

<400> 3755

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240					
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<210> 3756

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3756

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			20					25					30		
Ser	Glu	Glu	Thr	Thr	Ser	Asp	Asn	Asn	Thr	Ser	Ile	Thr	Thr	Pro	
		35					40				45				
Thr	Leu	Ser	Pro	Ser	Gln	Gln	Pro	Leu	Pro	Thr	Glu	Leu	Asn	Val	Thr
	50					55					60				
Ser	Pro	Ser	Lys	Glu	Glu	Cys	Gly	Pro	Cys	Thr	Asp	Thr	Ala	His	Val
65					70					75				80	
Ser	Leu	Ile	Thr	Pro	Thr	Lys	Arg	Ser	Cys	Gly	Thr	Asp	Ser	Gln	Ser
				85					90					95	
Glu	Asn	Glu	Ala	Ser	Pro	Val	Lys	Arg	Pro	Arg	Leu	Leu	Glu	Asn	Thr
			100					105					110		
Glu	Arg	Ser	Glu	Glu	Thr	Ser	Arg	Ser	Lys	Gln	Lys	Ser	Arg	Arg	Arg
		115				120						125			
Cys	Phe	Gln	Cys	Gln	Thr	Lys	Leu	Glu	Leu	Val	Gln	Gln	Glu	Leu	Gly
	130					135					140				
Ser	Cys	Arg	Cys	Gly	Tyr	Val	Phe	Cys	Met	Leu	His	Arg	Leu	Pro	Glu

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Gln	His	Asp	Cys	Thr	Phe	Asp	His	Met	Gly	Arg	Gly	Arg	Glu	Glu	Ala
		165		170		175									
Ile	Met	Lys	Met	Val	Lys	Leu	Asp	Arg	Lys	Val	Gly	Arg	Ser	Cys	Gln
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<210> 3757

<211> 1046

<212> DNA

<213> Homo sapiens

<400> 3757

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<210> 3758

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3758

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Gly Lys Ser Gly Leu Leu Thr Ser His Thr Thr Asp Ser Leu Gln Leu
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Trp Phe Val Arg Leu Ala Leu Leu Val Lys Leu Gly Leu Phe Gln Asn
          50           55           60
Ala Glu Met Glu Phe Glu Pro Phe Gly Asn Leu Asp Gln Pro Asp Leu
65           70           75           80
Tyr Ser Glu Tyr Tyr Pro His Val Tyr Pro Gly Arg Arg Gly Ser Met
          85           90           95
Val Pro Phe Ser Met Arg Ile Leu His Ala Glu Leu Gln Gln Tyr Leu
          100          105          110
Gly Asn Pro Gln Glu Ser Leu Asp Arg Leu His Lys Val Lys Thr Val
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Cys Ser Lys Val Gly Gly Ala Val Ile Leu Pro Cys His Gly Glu Asn
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145          150          155          160
Arg Pro Ala Pro Cys Thr Ile Ala Ala Ser Ala Phe Arg Arg Leu Gly
          165          170          175
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<210> 3759

<211> 830

<212> DNA

<213> Homo sapiens

<400> 3759

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<210> 3760

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3760

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			20					25					30		
Cys	Asp	Arg	Glu	Leu	Tyr	Pro	Gly	Glu	Pro	Arg	Leu	His	Leu	Ser	Ala
			35					40					45		
Pro	Gly	Pro	Ala	Ser	His	Gln	Asp	Gln	Pro	Glu	Trp	Gln	Glu	Asp	Met
			50					55					60		
Gly	Arg	Thr	Gly	Gly	Gly	Gly	Cys	Gly	His	Pro	Ser	Phe	Asn	Gln	Met
65						70				75					80
Leu	Asp	Val	Lys	Gly	Pro	Ile	Pro	Val	Lys	Arg	Gly	Gly	Gln	Ala	Leu
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Phe	Val	Leu	Leu												
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<210> 3761

<211> 458

<212> DNA

<213> Homo sapiens

<400> 3761

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<400> 3762
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<213> Homo sapiens

<400> 3764

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<213> Homo sapiens

<400> 3766

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<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 3768

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<211> 447

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Ala	Val	Arg	Glu	Glu	Cys	Arg	Leu	Leu	Asn	Ala	Pro	Pro	Val	Pro	Pro
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Val	Lys	Pro	Ala	Arg	Gln	Gln	Thr	Arg	Ser	Pro	Ser	Pro	Thr	Leu	Ser
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              355              360              365
Pro Val Thr Ala Glu Phe Ser Ser Ser Val Ser Gly Cys Pro Lys Ser
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Ala Ser Tyr Ser Leu Glu Ser Thr Asp Val Lys Ser Leu Ala Ala Gly
385              390              395              400
Val Thr Lys Gln Ser Thr Ser Cys Pro Ala Leu Pro Pro Arg Ala Pro
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<210> 3771

<211> 1514

<212> DNA

<213> Homo sapiens

<400> 3771

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<211> 280

<212> PRT

<213> Homo sapiens

<400> 3772

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Thr	Leu	Gln	His	Trp	Pro	His	Ile	Ile	Arg	Ile	Gly	Asp	Leu	Lys	Pro
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Thr	Gly	Pro	Gln	Leu	Thr	Ser	Arg	Ile	Lys	Gly	Asp	Trp	Ile	Gly	Leu
			165					170					175		
Tyr	Arg	His	Phe	Leu	Lys	Ser	Pro	Asn	Phe	Asp	Gly	Trp	Phe	Lys	Thr

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Arg	Arg	Lys	Glu	Met	Thr	Gln	Lys	Leu	Glu	Ala	Leu	His	Leu	Glu	Ala	
		195					200					205				
Leu	Cys	Glu	Glu	Asp	Leu	Leu	Leu	Trp	Ile	Gln	Lys	His	Thr	Glu	Val	
	210					215					220					
Glu	Thr	Val	Asp	Leu	Val	Leu	Lys	Leu	Lys	Asn	Lys	Leu	Leu	Gln	Ala	
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Asp	Arg	Glu	His	Leu	Pro	Val	Lys	Pro	Asp	Thr	Met	Glu	Lys	Leu	Arg	
				245				250						255		
Thr	His	Ile	Asp	Ala	Ile	Ile	Leu	Ala	Leu	Pro	Glu	Asp	Leu	Gln	Gly	
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<211> 2664

<212> DNA

<213> Homo sapiens

<400> 3773

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<211> 678

<212> PRT

<213> Homo sapiens

<400> 3774

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Val	Arg	Pro	Ala	Gly	Pro	Pro	Asn	Ala	Gly	Ser	Met	Ser	Ala	Gly	Ser
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Glu	Arg	Gly	Ala	Ala	Ala	Thr	Pro	Gly	Gly	Leu	Pro	Ala	Pro	Cys	Ala
	50					55					60				
Ser	Lys	Val	Glu	Leu	Arg	Leu	Ser	Cys	Arg	His	Leu	Leu	Asp	Arg	Asp
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Pro	Leu	Thr	Lys	Ser	Asp	Pro	Ser	Val	Ala	Leu	Leu	Gln	Gln	Ala	Gln
				85					90					95	
Gly	Gln	Trp	Val	Gln	Val	Gly	Arg	Thr	Glu	Val	Val	Arg	Ser	Ser	Leu
			100					105					110		
His	Pro	Val	Phe	Ser	Lys	Val	Phe	Thr	Val	Asp	Tyr	Tyr	Phe	Glu	Glu
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Val	Gln	Arg	Leu	Arg	Phe	Glu	Val	Tyr	Asp	Thr	His	Gly	Pro	Ser	Gly
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Phe	Ser	Cys	Gln	Glu	Asp	Asp	Phe	Leu	Gly	Gly	Met	Glu	Cys	Thr	Leu
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Arg	Tyr	Asp	Asp	Leu	Cys	Leu	Pro	Trp	Ala	Thr	Ala	Gly	Ala	Val	Arg
	210					215						220			
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Ser	Cys	Asp	Val	His	Arg	Pro	Leu	Lys	Phe	Leu	Val	Trp	Asp	Tyr	Asp
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Ser	Ser	Gly	Lys	His	Asp	Phe	Ile	Gly	Glu	Phe	Thr	Ser	Thr	Phe	Gln

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370	375	380
Cys Ile Asn Pro Lys Tyr Arg Asp Lys Lys Lys Asn Tyr Lys Asn Ser		
385	390	395
Gly Val Val Val Leu Ala Asp Leu Lys Phe His Arg Val Tyr Ser Phe		
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Leu Asp Tyr Ile Met Gly Gly Cys Gln Ile Ser Phe Thr Val Ala Ile		
	420	425
Asp Phe Thr Ala Ser Asn Gly Asp Pro Arg Ser Ser Gln Ser Leu His		
	435	440
Tyr Ile Ser Pro Arg Gln Pro Asn His Tyr Leu Gln Ala Leu Arg Ala		
	450	455
Val Gly Gly Ile Cys Gln Asp Tyr Asp Ser Asp Lys Arg Phe Pro Ala		
465	470	475
Phe Gly Phe Gly Ala Arg Ile Pro Pro Asn Phe Glu Val Ser His Asp		
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Phe Ala Ile Asn Phe Asn Pro Glu Asp Asp Glu Cys Glu Gly Ile Gln		
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Gly Val Val Glu Ala Tyr Gln Asn Cys Leu Pro Arg Val Gln Leu Tyr		
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Gly Pro Thr Asn Val Ala Pro Ile Ile Ser Lys Val Ala Glu Pro Ala		
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Gln Arg Glu Gln Ser Thr Gly Gln Ala Thr Lys Tyr Ser Val Leu Leu		
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<211> 549

<212> DNA

<213> Homo sapiens

<400> 3775

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120

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180

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<210> 3776

<211> 183

<212> PRT

<213> Homo sapiens

<400> 3776

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			20					25					30		
Pro	Met	Glu	Gln	Asn	Val	Ala	Glu	Leu	Leu	Gln	Phe	Leu	Leu	Val	Lys
		35					40					45			
Asp	Gln	Ser	Lys	Tyr	Pro	Ile	Arg	Glu	Ser	Glu	Met	Arg	Glu	Tyr	Ile
	50					55					60				
Val	Lys	Glu	Tyr	Arg	Asn	Gln	Phe	Pro	Glu	Ile	Leu	Arg	Arg	Ala	Ala
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Ala	His	Leu	Glu	Cys	Ile	Phe	Arg	Phe	Glu	Leu	Arg	Glu	Leu	Asp	Pro
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Glu	Ala	His	Thr	Tyr	Ile	Leu	Leu	Asn	Lys	Leu	Gly	Pro	Val	Pro	Phe
			100					105					110		
Glu	Gly	Leu	Glu	Glu	Ser	Pro	Asn	Gly	Pro	Lys	Met	Gly	Leu	Leu	Met
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Met	Ile	Leu	Gly	Gln	Ile	Phe	Leu	Asn	Gly	Asn	Gln	Ala	Lys	Glu	Ala
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Leu	Ser	Ile	Phe	Gly	Asn	Pro	Lys	Arg	Leu	Leu	Ser	Val	Glu	Phe	Val
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<210> 3777

<211> 4915

<212> DNA

<213> Homo sapiens

<400> 3777

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 Ser Tyr Pro Glu Arg Asp Arg Tyr Pro Glu Arg Asp Asn Arg Asp Gln
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<210> 3781

<211> 1364

<212> DNA

<213> Homo sapiens

<400> 3781

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<212> PRT

<213> Homo sapiens

<400> 3782

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<210> 3783

<211> 4137

<212> DNA

<213> Homo sapiens

<400> 3783

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<211> 804

<212> PRT

<213> Homo sapiens

<400> 3784

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Leu	Leu	Glu	Arg	Val	Glu	Glu	Pro	Val	Leu	Gln	Asn	Gln	Ile	Arg	Glu	35	40	45	
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<211> 1901

<212> DNA

<213> Homo sapiens

<400> 3785

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<213> Homo sapiens

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<210> 3787

<211> 717

<212> DNA

<213> Homo sapiens

<400> 3787

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<210> 3788

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3788

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Pro	Trp	Gly	Ala	Lys	Cys	Ser	Trp	Arg	Gln	Val	Ala	Lys	Gly	Glu	His		
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<210> 3789

<211> 4341

<212> DNA

<213> Homo sapiens

<400> 3789

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<210> 3790
 <211> 1092
 <212> PRT
 <213> Homo sapiens

<400> 3790

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 35          40          45
Glu Asp Leu His Asn Glu Lys Glu Leu Ile Lys Glu Leu Glu Gln Ser
 50          55          60
Leu Ala Ser Trp Thr Gln Asn Leu Lys Glu Leu Gln Thr Met Lys Ala
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Asp Leu Thr Arg His Val Leu Val Glu Asp Val Met Val Leu Lys Glu
 85          90          95
Gln Ile Glu His Leu His Arg Gln Trp Glu Asp Leu Cys Leu Arg Val
 100          105          110
Ala Ile Arg Lys Gln Glu Ile Glu Asp Arg Leu Asn Thr Trp Val Val
 115          120          125
Phe Asn Glu Lys Asn Lys Glu Leu Cys Ala Trp Leu Val Gln Met Glu
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Asn Lys Val Leu Gln Thr Val Asp Ile Ser Ile Glu Glu Met Ile Glu
 145          150          155          160
Lys Leu Gln Lys Asp Cys Met Glu Glu Ile Asn Leu Phe Ser Glu Asn
 165          170          175
Lys Leu Gln Leu Lys Gln Met Gly Asp Gln Leu Ile Lys Ala Ser Asn
 180          185          190
Lys Ser Arg Ala Ala Glu Ile Asp Asp Lys Leu Asn Lys Ile Asn Asp
 195          200          205
Arg Trp Gln His Leu Phe Asp Val Ile Gly Ser Arg Val Lys Lys Leu
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Lys Glu Thr Phe Ala Phe Ile Gln Gln Leu Asp Lys Asn Met Ser Asn
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Ser Val Phe Asn Ile Cys Asp Val Leu Leu His Asp Ser Asp Ala Cys
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Lys Ile Glu Glu Thr Trp Arg Leu Trp Gln Lys Phe Leu Asp Asp Tyr
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      405              410              415
Asp Thr Ala Ser Arg Leu Lys Gln Met Val His Glu Gly Asn Gln Arg
      420              425              430
Trp Asp Asn Leu Gln Arg Arg Val Thr Ala Val Leu Arg Arg Leu Arg
      435              440              445
His Phe Thr Asn Gln Arg Glu Phe Glu Gly Thr Arg Glu Ser Ile
      450              455              460
Leu Val Trp Leu Thr Glu Met Asp Leu Gln Leu Thr Asn Val Glu His
465              470              475              480
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      485              490              495
Gln Gln Glu Ile Thr Leu Asn Thr Asn Lys Ile Asp Gln Leu Ile Val
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Phe Gly Glu Gln Leu Ile Gln Lys Ser Glu Pro Leu Asp Ala Val Leu
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      530              535              540
Gly Arg Val Ser Arg Phe His Arg Arg Leu Thr Ser Cys Thr Pro Gly
545              550              555              560
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Glu Arg Ser Gly Cys Glu Thr Pro Val Ser Val Asp Ser Ile Pro Leu
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His Tyr Lys Gln Met Glu Gly Asp Arg Asn Val Pro Pro Val Pro Pro
      675              680              685
Ala Ser Ser Thr Pro Tyr Lys Pro Pro Tyr Gly Lys Leu Leu Leu Pro
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Pro Gly Thr Asp Gly Gly Lys Glu Gly Pro Arg Val Leu Asn Gly Asn
705              710              715              720
Pro Gln Gln Glu Asp Gly Gly Leu Ala Gly Ile Thr Glu Gln Gln Ser
      725              730              735
Gly Ala Phe Asp Arg Trp Glu Met Ile Gln Ala Gln Glu Leu His Asn
      740              745              750
Lys Leu Lys Ile Lys Gln Asn Leu Gln Gln Leu Asn Ser Asp Ile Ser
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Lys	Gln	Leu	Arg	Glu	Gln	Val	Ser	Gln	Asp	Leu	Met	Ala	Leu	Gln	Gly		
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Phe	Arg	Ala	Val	Arg	Thr	Thr	Glu	Gly	Glu	Glu	Glu	Thr	Glu	Ser	Arg		
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<210> 3791

<211> 1011

<212> DNA

<213> Homo sapiens

<400> 3791

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<210> 3792

<211> 288

<212> PRT

<213> Homo sapiens

<400> 3792

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<210> 3793

<211> 360

<212> DNA

<213> Homo sapiens

<400> 3793

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<210> 3794

<211> 96

<212> PRT

<213> Homo sapiens

<400> 3794

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		20						25				30					
Phe	Val	Pro	Gly	Arg	Asn	Asn	Ser	Phe	Phe	Phe	Ser	Trp	Arg	Gln	Cys		
	35					40					45						
Phe	Thr	Leu	Val	Ala	Gln	Ala	Gly	Gly	Gln	Trp	Arg	Asp	Leu	Ser	Ser		
	50				55				60								
Leu	Gln	Pro	Pro	Pro	Phe	Gly	Leu	Lys	Arg	Phe	Ser	Cys	Leu	Ser	Leu		
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Pro	Ser	Ser	Trp	Asp	Tyr	Arg	His	Ala	Ser	Pro	Cys	Thr	Met	Pro	Asp		
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<210> 3795

<211> 1341

<212> DNA

<213> Homo sapiens

<400> 3795

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<210> 3796

<211> 294

<212> PRT

<213> Homo sapiens

<400> 3796

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Pro Asn Gln Leu Tyr Tyr Glu Gly Glu Leu Gln Ala Cys Ala Asp Val
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Val Asp Arg Glu Arg Phe Cys Arg Trp Ala Gly Leu Pro Arg Gln Gly
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Phe Pro Ile Ile Phe His Gly Val Met Gly Lys Asp Glu Arg Glu Gly
65          70          75          80
Asn Ser Pro Ser Phe Phe Asn Pro Glu Glu Ala Ala Thr Val Thr Ser
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Tyr Leu Lys Leu Leu Leu Ala Pro Ser Ser Lys Lys Gly Lys Ala Arg
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Leu Ser Pro Arg Ser Val Gly Val Ile Ser Pro Tyr Arg Lys Gln Val
          115          120          125
Glu Lys Ile Arg Tyr Cys Ile Thr Lys Leu Asp Arg Glu Leu Arg Gly
          130          135          140
Leu Asp Asp Ile Lys Asp Leu Lys Val Gly Ser Val Glu Glu Phe Gln
145          150          155          160
Gly Gln Glu Arg Ser Val Ile Leu Ile Ser Thr Val Arg Ser Ser Gln
          165          170          175
Ser Phe Val Gln Leu Asp Leu Asp Phe Asn Leu Gly Phe Leu Lys Asn
          180          185          190
Pro Lys Arg Phe Asn Val Ala Val Thr Arg Ala Lys Ala Leu Leu Ile
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Ile Val Gly Asn Pro Leu Leu Leu Gly His Asp Pro Asp Trp Lys Val
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Phe Leu Glu Phe Cys Lys Glu Asn Gly Gly Tyr Thr Gly Cys Pro Phe
225          230          235          240
Pro Ala Lys Leu Asp Leu Gln Gln Gly Gln Asn Leu Leu Gln Gly Leu
          245          250          255
Ser Lys Leu Ser Pro Ser Thr Ser Gly Pro His Ser His Asp Tyr Leu
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Pro Gln Glu Arg Glu Gly Glu Gly Gly Leu Ser Leu Gln Val Glu Pro
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Glu Trp Arg Asn Glu Leu
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<210> 3797

<211> 1970

<212> DNA

<213> Homo sapiens

<400> 3797

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<210> 3798

<211> 473

<212> PRT

<213> Homo sapiens

<400> 3798

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			20					25					30		
His	Trp	Trp	Ser	Glu	Arg	Thr	His	Lys	Asn	Leu	Ser	Asp	Met	Glu	Asn
			35				40					45			
Glu	Phe	Tyr	Tyr	Arg	Tyr	Pro	Ser	Phe	Gln	Asp	Val	His	Val	Met	Val
			50			55					60				
Phe	Val	Gly	Phe	Gly	Phe	Leu	Met	Thr	Phe	Leu	Gln	Arg	Tyr	Gly	Phe
65					70					75				80	
Ser	Ala	Val	Gly	Phe	Asn	Phe	Leu	Leu	Ala	Ala	Phe	Gly	Ile	Gln	Trp
				85					90					95	
Ala	Leu	Leu	Met	Gln	Gly	Trp	Phe	His	Phe	Leu	Gln	Asp	Arg	Tyr	Ile
			100					105					110		
Val	Val	Gly	Val	Glu	Asn	Leu	Ile	Asn	Ala	Asp	Phe	Cys	Val	Ala	Ser
			115				120					125			
Val	Cys	Val	Ala	Phe	Gly	Ala	Val	Leu	Gly	Lys	Val	Ser	Pro	Ile	Gln
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Leu	Leu	Ile	Met	Thr	Phe	Gln	Val	Thr	Leu	Phe	Ala	Val	Asn	Glu	
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Phe	Ile	Leu	Leu	Asn	Leu	Leu	Lys	Val	Lys	Asp	Ala	Gly	Gly	Ser	Met
				165					170					175	
Thr	Ile	His	Thr	Phe	Gly	Ala	Tyr	Phe	Gly	Leu	Thr	Val	Thr	Arg	Ile
			180					185					190		
Leu	Tyr	Arg	Arg	Asn	Leu	Glu	Gln	Ser	Lys	Glu	Arg	Gln	Asn	Ser	Val
			195				200					205			
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			210			215					220				
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His	Arg	Ala	Ala	Ile	Asn	Thr	Tyr	Cys	Ser	Leu	Ala	Ala	Cys	Val	Leu
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			260					265					270		
Met	Val	His	Ile	Gln	Asn	Ala	Thr	Leu	Ala	Gly	Gly	Val	Ala	Val	Gly
			275				280					285			
Thr	Ala	Ala	Glu	Met	Met	Leu	Met	Pro	Tyr	Gly	Ala	Leu	Ile	Ile	Gly
			290			295					300				
Phe	Val	Cys	Gly	Ile	Ile	Ser	Thr	Leu	Gly	Phe	Val	Tyr	Leu	Thr	Pro
305					310					315				320	
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          355          360          365
Ser Phe Asp Phe Gln Gly Phe Asn Gly Asp Trp Thr Ala Arg Thr Gln
          370          375          380
Gly Lys Phe Gln Ile Tyr Gly Leu Leu Val Thr Leu Ala Met Ala Leu
385          390          395          400
Met Gly Gly Ile Ile Val Gly Leu Ile Leu Arg Leu Pro Phe Trp Gly
          405          410          415
Gln Pro Ser Asp Glu Asn Cys Phe Glu Asp Ala Val Tyr Trp Glu Met
          420          425          430
Pro Glu Gly Asn Ser Thr Val Tyr Ile Pro Glu Asp Pro Thr Phe Lys
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Met Ala Ser Ser Val Pro Leu Val Pro
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<210> 3799
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 <212> DNA
 <213> Homo sapiens

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<210> 3800
 <211> 70
 <212> PRT
 <213> Homo sapiens

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<210> 3801
 <211> 4070

<212> DNA

<213> Homo sapiens

<400> 3801

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<210> 3802

<211> 476

<212> PRT

<213> Homo sapiens

<400> 3802

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			20					25					30		
Leu	Trp	Thr	Ala	Ile	Thr	Leu	Phe	Ile	Phe	Leu	Val	Cys	Cys	Gln	Ile
		35					40					45			
Pro	Leu	Phe	Gly	Ile	Met	Ser	Ser	Asp	Ser	Ala	Asp	Pro	Phe	Tyr	Trp
	50					55					60				
Met	Arg	Val	Ile	Leu	Ala	Ser	Asn	Arg	Gly	Thr	Leu	Met	Glu	Leu	Gly
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Ile	Ser	Pro	Ile	Val	Thr	Ser	Gly	Leu	Ile	Met	Gln	Leu	Leu	Ala	Gly
			85					90						95	
Ala	Lys	Ile	Ile	Glu	Val	Gly	Asp	Thr	Pro	Lys	Asp	Arg	Ala	Leu	Phe
			100					105					110		
Asn	Gly	Ala	Gln	Lys	Leu	Phe	Gly	Met	Ile	Ile	Thr	Ile	Gly	Gln	Ser

		115					120					125				
Ile	Val	Tyr	Val	Met	Thr	Gly	Met	Tyr	Gly	Asp	Pro	Ser	Glu	Met	Gly	
	130					135					140					
Ala	Gly	Ile	Cys	Leu	Leu	Ile	Ile	Ile	Gln	Leu	Phe	Val	Ala	Gly	Leu	
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Ile	Val	Leu	Leu	Leu	Asp	Glu	Leu	Leu	Gln	Lys	Gly	Tyr	Gly	Leu	Gly	
				165					170					175		
Ser	Gly	Ile	Ser	Leu	Phe	Ile	Ala	Thr	Asn	Ile	Cys	Glu	Thr	Ile	Val	
			180					185					190			
Trp	Lys	Ala	Phe	Ser	Pro	Thr	Thr	Ile	Asn	Thr	Gly	Arg	Gly	Thr	Glu	
		195					200					205				
Phe	Glu	Gly	Ala	Val	Ile	Ala	Leu	Phe	His	Leu	Leu	Ala	Thr	Arg	Thr	
	210					215					220					
Asp	Lys	Val	Arg	Ala	Leu	Arg	Glu	Ala	Phe	Tyr	Arg	Gln	Asn	Leu	Pro	
225					230					235					240	
Asn	Leu	Met	Asn	Leu	Ile	Ala	Thr	Ile	Phe	Val	Phe	Ala	Val	Val	Ile	
			245						250					255		
Tyr	Phe	Gln	Gly	Phe	Arg	Val	Asp	Leu	Pro	Ile	Lys	Ser	Ala	Arg	Tyr	
			260					265					270			
Arg	Gly	Gln	Tyr	Asn	Thr	Tyr	Pro	Ile	Lys	Leu	Phe	Tyr	Thr	Ser	Asn	
		275					280					285				
Ile	Pro	Ile	Ile	Leu	Gln	Ser	Ala	Leu	Val	Ser	Asn	Leu	Tyr	Val	Ile	
	290					295					300					
Ser	Gln	Met	Leu	Ser	Ala	Arg	Phe	Ser	Gly	Asn	Phe	Leu	Val	Asn	Leu	
305					310					315					320	
Leu	Gly	Gln	Trp	Ser	Asp	Thr	Ser	Ser	Gly	Gly	Pro	Ala	Arg	Ala	Tyr	
			325						330					335		
Pro	Val	Gly	Gly	Leu	Cys	Tyr	Tyr	Leu	Ser	Pro	Pro	Glu	Ser	Phe	Gly	
			340					345					350			
Ser	Val	Leu	Glu	Asp	Pro	Val	His	Ala	Val	Val	Tyr	Ile	Val	Phe	Met	
		355					360					365				
Leu	Gly	Ser	Cys	Ala	Phe	Phe	Ser	Lys	Thr	Trp	Ile	Glu	Val	Ser	Gly	
	370					375					380					
Ser	Ser	Ala	Lys	Asp	Val	Ala	Lys	Gln	Leu	Lys	Glu	Gln	Gln	Met	Val	
385					390					395					400	
Met	Arg	Gly	His	Arg	Glu	Thr	Ser	Met	Val	His	Glu	Leu	Asn	Arg	Tyr	
			405						410					415		
Ile	Pro	Thr	Ala	Ala	Ala	Phe	Gly	Gly	Leu	Cys	Ile	Gly	Ala	Leu	Ser	
			420					425					430			
Val	Leu	Ala	Asp	Phe	Leu	Gly	Ala	Ile	Gly	Ser	Gly	Thr	Gly	Ile	Leu	
		435					440					445				
Leu	Ala	Val	Thr	Ile	Ile	Tyr	Gln	Tyr	Phe	Glu	Ile	Phe	Val	Lys	Glu	
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Gln	Ser	Glu	Val	Gly	Ser	Met	Gly	Ala	Leu	Leu	Phe					
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<210> 3803

<211> 345

<212> DNA

<213> Homo sapiens

<400> 3803

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 120
 aaatatgccc acttgagtga tgagcttcat gtattaattg aagtgtttgc tccacctggg
 180
 gaagcttatt cacgtatgag tcatgcattg gaagagatta aaaaattcct gggtcctgac
 240
 tacaatgatg aaattcgtca ggaacaacta cgtgaattat cttacttaaa tggctcagag
 300
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 345

<210> 3804

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3804

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Met	Ser	Ile	Leu	Gly	Lys	Gly	Ser	Met	Arg	Asp	Lys	Ala	Lys	Glu	Glu
			20					25					30		
Glu	Leu	Arg	Lys	Ser	Gly	Glu	Ala	Lys	Tyr	Ala	His	Leu	Ser	Asp	Glu
			35				40					45			
Leu	His	Val	Leu	Ile	Glu	Val	Phe	Ala	Pro	Pro	Gly	Glu	Ala	Tyr	Ser
	50				55						60				
Arg	Met	Ser	His	Ala	Leu	Glu	Glu	Ile	Lys	Lys	Phe	Leu	Val	Pro	Asp
65					70					75				80	
Tyr	Asn	Asp	Glu	Ile	Arg	Gln	Glu	Gln	Leu	Arg	Glu	Leu	Ser	Tyr	Leu
			85					90						95	
Asn	Gly	Ser	Glu	Asp	Ser	Gly	Arg	Gly	Arg	Gly	Ile	Arg	Gly	Arg	Gly
			100					105						110	
Ile	Arg	Ile													
			115												

<210> 3805

<211> 1923

<212> DNA

<213> Homo sapiens

<400> 3805

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 120
 aagagcccgt tgcctaccag atgccaggcc ctgtgcttcc tctgtccttt gaggttttgg
 180
 cttgtgatca accaggaggg aaacatggtt actgctcgcc aggaacctcg cctggctcctg
 240
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 300
 ctactgccta tcaaaacgcc caccacaaat gcagtgcaca agtgcagagt gcacggcctg
 360
 gagatagagg gcagggactg tggcgaggcc gccgcccagt ggataaccag cttctgaag
 420

tcacagccct accgcctggt gcacttcgag cctcacatgc gaccgagacg tcctcatcaa
480
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540
atcctttctg aggcgtcgct ggcggtatctc aactccaggc tagagaagaa agttaagca
600
accaacttca ggccaatat tgtaatttca ggatgcgatg tctatgcaga ggattcttgg
660
gatgagcttc ttattggtga cgtggaactg aaaagggatga tggcttggtc cagatgcatt
720
ttaaccacag tggacccaga caccggtgtc atgagcagga aggaaccgct ggaaacactg
780
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900
ctggggcagt aatgggaacc gtatgtcctg gaattattaga tgcccttttaaa aaatgttctc
960
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1020
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1080
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1140
aatgacaaga caggattctg aaaactcccc gtttaactga ttatggaata gttctttctc
1200
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1260
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1320
tattgcccct gttcatgagg tacgcaatga aaattaaatt gcaccccaaa tatggctgga
1380
atgccacttc ccttttcttc tcaagccccg ggctagcttt tgaaatggca taaagactga
1440
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1560
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1620
cgggtgaaaa agttctgaat tctgtggagg agaagaaaag tgattcagtg atttcagata
1680
gactactgaa aacctttaaa gggggaaaag gaaagcatat gtcagttggt taaaacccaa
1740
tatctatttt ttaactgatt gtataactct aagatctgat gaagtatatt ttttattgcc
1800
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1920
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1923

<210> 3806

<211> 280
 <212> PRT
 <213> Homo sapiens

<400> 3806

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 20          25          30
Pro Leu Arg Phe Trp Leu Val Ile Asn Gln Glu Gly Asn Met Val Thr
 35          40          45
Ala Arg Gln Glu Pro Arg Leu Val Leu Ile Ser Leu Thr Cys Asp Gly
 50          55          60
Asp Thr Leu Thr Leu Ser Ala Ala Tyr Thr Lys Asp Leu Leu Leu Pro
 65          70          75          80
Ile Lys Thr Pro Thr Thr Asn Ala Val His Lys Cys Arg Val His Gly
 85          90          95
Leu Glu Ile Glu Gly Arg Asp Cys Gly Glu Ala Ala Ala Gln Trp Ile
 100         105         110
Thr Ser Phe Leu Lys Ser Gln Pro Tyr Arg Leu Val His Phe Glu Pro
 115         120         125
His Met Arg Pro Arg Arg Pro His Gln Ile Ala Asp Leu Phe Arg Pro
 130         135         140
Lys Asp Gln Ile Ala Tyr Ser Asp Thr Ser Pro Phe Leu Ile Leu Ser
 145         150         155         160
Glu Ala Ser Leu Ala Asp Leu Asn Ser Arg Leu Glu Lys Lys Val Lys
 165         170         175
Ala Thr Asn Phe Arg Pro Asn Ile Val Ile Ser Gly Cys Asp Val Tyr
 180         185         190
Ala Glu Asp Ser Trp Asp Glu Leu Leu Ile Gly Asp Val Glu Leu Lys
 195         200         205
Arg Val Met Ala Cys Ser Arg Cys Ile Leu Thr Thr Val Asp Pro Asp
 210         215         220
Thr Gly Val Met Ser Arg Lys Glu Pro Leu Glu Thr Leu Lys Ser Tyr
 225         230         235         240
Arg Gln Cys Asp Pro Ser Glu Arg Lys Leu Tyr Gly Lys Ser Pro Leu
 245         250         255
Phe Gly Gln Tyr Phe Val Leu Glu Asn Pro Gly Thr Ile Lys Val Gly
 260         265         270
Asp Pro Val Tyr Leu Leu Gly Gln
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<210> 3807
 <211> 372
 <212> DNA
 <213> Homo sapiens

<400> 3807

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cagggagggtc gcttcccggg gctcagctac caccgggtc ccagcggcag agggagcgcg
 180

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ccctccccac gctccgcccc tgggtggctg cgtcctttct gggccttttc tttttggccc
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<210> 3808

<211> 85

<212> PRT

<213> Homo sapiens

<400> 3808

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Arg	Tyr	Pro	Arg	Ala	Val	Ile	Val	Pro	Tyr	Leu	Val	Asp	Asp	Asp	Ala
			20					25				30			
Leu	Ala	Arg	Ser	Ala	Arg	Phe	Arg	Gln	Gly	Gly	Arg	Phe	Pro	Val	Leu
			35				40					45			
Ser	Tyr	His	Pro	Ala	Pro	Ser	Gly	Arg	Gly	Ser	Ala	Pro	Ser	Pro	Arg
		50				55					60				
Ser	Ala	Pro	Gly	Trp	Leu	Arg	Pro	Phe	Trp	Ala	Phe	Ser	Phe	Trp	Pro
65					70					75				80	
Gly	Gln	Phe	Ala	Ala											
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<210> 3809

<211> 1221

<212> DNA

<213> Homo sapiens

<400> 3809

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 120
 ataagctgtg actttttgcc cctgatgcca taagttggag ggtcctctgc tcaaaacata
 180
 tggtacacac ttctccttct ttcatctgg tatcatgtat catctctcag atccaataag
 240
 aaaacattcc cacgtccttc cctccctccc tagtaccaag gtcctcatct cagttttcat
 300
 ggggccatgg agggctgcct ctagtgatga gctggaatct taaggcctga aatagagcca
 360
 gactgcagca gtcccaagtc ctggagagct tcaagtaact gctcccgcgc agagccaata
 420
 aaggaattct ccaggaaggt aggcaggcct cctacacat cccgcagggt atacaggggc
 480
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 540
 acagccaaca gctcctcgag ctccagacgt tggcatagaa gtgccacaac gcgtggccct
 600

gacccgacgt gggagctgcg gtagtcagtg cgctccacgc ggaaagcggc agccgcttcg
 660
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 780
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 1020
 gtacattttg tctgggttttc tagttaaggc aggaggataa atctgttgcc tgtttttcca
 1080
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 1140
 tcttactaat cttttctcaa tacctaaagt tcaaaatctc ttttgtcaat ctgttatcaa
 1200
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 1221

<210> 3810

<211> 97

<212> PRT

<213> Homo sapiens

<400> 3810

Ala	Gly	Ile	Leu	Arg	Pro	Glu	Ile	Glu	Pro	Asp	Cys	Ser	Ser	Pro	Lys
1				5					10					15	
Ser	Trp	Arg	Ala	Ser	Ser	Asn	Cys	Ser	Arg	Ala	Glu	Pro	Ile	Lys	Glu
			20					25					30		
Phe	Ser	Arg	Lys	Val	Gly	Arg	Pro	Pro	Thr	Pro	Ser	Arg	Arg	Val	Tyr
		35				40					45				
Arg	Gly	Thr	Arg	Thr	Arg	Pro	Ser	Thr	Ser	Ser	Pro	Trp	Ser	Leu	Ala
	50				55						60				
Arg	Val	Ala	Pro	Ala	Ser	Thr	Ala	Asn	Ser	Ser	Ser	Ser	Ser	Asp	Ala
65					70				75					80	
Trp	His	Arg	Ser	Ala	Thr	Thr	Arg	Gly	Pro	Asp	Pro	Thr	Trp	Glu	Leu
				85					90					95	

Arg

<210> 3811

<211> 296

<212> DNA

<213> Homo sapiens

<400> 3811

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 120

acaccacgcc agatatctgg gcagcagggg catctgacct ggggtgcttg ctggcagcac
 180
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 296

<210> 3812

<211> 94

<212> PRT

<213> Homo sapiens

<400> 3812

Met	Gly	Ala	Arg	Ala	Arg	Ser	Leu	Ile	Val	Pro	Pro	Thr	Ala	Gln	Val
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Pro	Val	Leu	Lys	Ala	Gln	Asn	Cys	Arg	Pro	Ser	Gly	Arg	Pro	Val	Leu
			20					25					30		
Pro	Tyr	Gln	Arg	Thr	Pro	Arg	Gln	Ile	Ser	Gly	Gln	Gln	Gly	His	Leu
		35					40					45			
Thr	Trp	Gly	Ala	Cys	Trp	Gln	His	Cys	Leu	Asp	Ser	Arg	Ala	Ser	Leu
	50					55				60					
Gly	Pro	Pro	Pro	Asn	Pro	Ala	Arg	Glu	Arg	Leu	Lys	Ala	Cys	Pro	Pro
65				70				75					80		
Cys	Trp	Ala	Trp	Val	Gly	Arg	Ser	Gly	Thr	Gly	Pro	Ser	Arg		
			85					90							

<210> 3813

<211> 1419

<212> DNA

<213> Homo sapiens

<400> 3813

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 120
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 180
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 240
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 300
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 360
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 420
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 480
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 540
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 600
 aatcccagtg gtgagacagc attcaaagcc atgatggagt cctttggctg ggcccggcgc
 660

cctatgctgg agcgaattca cttgattcga aaagatgtgc ctatcactat gatctacggg
 720
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 780
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 840
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 1320
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<210> 3814

<211> 294

<212> PRT

<213> Homo sapiens

<400> 3814

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Gln	Asn	Asp	Arg	Thr	Pro	Leu	Val	Met	Val	His	Gly	Phe	Gly	Gly	Gly
		20						25					30		
Val	Gly	Leu	Trp	Ile	Leu	Asn	Met	Asp	Ser	Leu	Ser	Ala	Arg	Arg	Thr
		35					40					45			
Leu	His	Thr	Phe	Asp	Leu	Leu	Gly	Phe	Gly	Arg	Ser	Ser	Arg	Pro	Ala
	50					55				60					
Phe	Pro	Arg	Asp	Pro	Glu	Gly	Ala	Glu	Asp	Glu	Phe	Val	Thr	Ser	Ile
65					70				75					80	
Glu	Thr	Trp	Arg	Glu	Thr	Met	Gly	Ile	Pro	Ser	Met	Ile	Leu	Leu	Gly
			85					90					95		
His	Ser	Leu	Gly	Gly	Phe	Leu	Ala	Thr	Ser	Tyr	Ser	Ile	Lys	Tyr	Pro
		100					105					110			
Asp	Arg	Val	Lys	His	Leu	Ile	Leu	Val	Asp	Pro	Trp	Gly	Phe	Pro	Leu
	115					120					125				
Arg	Pro	Thr	Asn	Pro	Ser	Glu	Ile	Arg	Ala	Pro	Pro	Ala	Trp	Val	Lys
	130					135					140				
Ala	Val	Ala	Ser	Val	Leu	Gly	Arg	Ser	Asn	Pro	Leu	Ala	Val	Leu	Arg
145					150				155					160	
Val	Ala	Gly	Pro	Trp	Gly	Pro	Gly	Leu	Val	Gln	Arg	Phe	Arg	Pro	Asp

				165					170					175					
Phe	Lys	Arg	Lys	Phe	Ala	Asp	Phe	Phe	Glu	Asp	Asp	Thr	Ile	Ser	Glu				
			180						185					190					
Tyr	Ile	Tyr	His	Cys	Asn	Ala	Gln	Asn	Pro	Ser	Gly	Glu	Thr	Ala	Phe				
		195					200						205						
Lys	Ala	Met	Met	Glu	Ser	Phe	Gly	Trp	Ala	Arg	Arg	Pro	Met	Leu	Glu				
	210					215						220							
Arg	Ile	His	Leu	Ile	Arg	Lys	Asp	Val	Pro	Ile	Thr	Met	Ile	Tyr	Gly				
225					230					235					240				
Ser	Asp	Thr	Trp	Ile	Asp	Thr	Ser	Thr	Gly	Lys	Lys	Val	Lys	Met	Gln				
			245						250					255					
Arg	Pro	Asp	Ser	Tyr	Val	Arg	Asp	Met	Glu	Ile	Lys	Gly	Ala	Ser	His				
			260				265						270						
His	Val	Tyr	Ala	Asp	Gln	Pro	His	Ile	Phe	Asn	Ala	Val	Val	Glu	Glu				
		275					280						285						
Ile	Cys	Asp	Ser	Val	Asp														
	290																		

<210> 3815

<211> 3669

<212> DNA

<213> Homo sapiens

<400> 3815

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120
gccagtgcgc cggtcagtgc ctccctccag actcggggagg gtcgaggggg cgccgggagag
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Ile Arg Lys Leu Arg Gln Asp Ile Leu Leu Met Lys Pro Tyr Phe Ile
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65             70             75             80
Asp Val His Ala Gly Arg Leu Gly Cys Ser Leu Thr Glu Ile His Thr
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Leu Phe Ala Lys His Ile Lys Leu Asp Cys Glu Arg Cys Gln Ala Lys
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<210> 3834

<211> 361

<212> PRT

<213> Homo sapiens

<400> 3834

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Val	Ser	Val	Cys	Asp	His	Cys	Lys	Gly	Lys	Met	Gln	Leu	Val	Ala	Asp
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		260						265					270		
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		275					280					285			
Gly	Gly	Ala	Met	Ser	Val	Val	Ser	Ala	Cys	Val	Leu	Leu	Thr	Gln	Cys

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Leu Arg Asp Leu Ala Gln His Pro Asp Gly Gly Ala Lys Met Ser Asp				
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His Arg Glu Arg Leu Arg Asn Ser Ala Cys Ala Val Ser Glu Gly Cys				320
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<211> 2366

<212> DNA

<213> Homo sapiens

<400> 3835

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<210> 3836

<211> 479

<212> PRT

<213> Homo sapiens

<400> 3836

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			20					25					30		
Gly	Gly	Ile	Glu	Gln	Met	Gly	Leu	Ala	Met	Glu	His	Gly	Gly	Ser	Tyr

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	50					55					60					
Phe	Phe	Leu	Phe	Val	Ser	Leu	Ile	Gln	Phe	Leu	Ile	Ile	Leu	Gly	Leu	
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Val	Leu	Phe	Met	Val	Tyr	Gly	Asn	Val	His	Val	Ser	Thr	Glu	Ser	Asn	
				85					90					95		
Leu	Gln	Ala	Thr	Glu	Arg	Arg	Ala	Glu	Gly	Leu	Tyr	Ser	Gln	Leu	Leu	
			100					105					110			
Gly	Leu	Thr	Ala	Ser	Gln	Ser	Asn	Leu	Thr	Lys	Glu	Leu	Asn	Phe	Thr	
		115					120					125				
Thr	Arg	Ala	Lys	Asp	Ala	Ile	Met	Gln	Met	Trp	Leu	Asn	Ala	Arg	Arg	
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Asp	Leu	Asp	Arg	Ile	Asn	Ala	Ser	Phe	Arg	Gln	Cys	Gln	Gly	Asp	Arg	
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Val	Ile	Tyr	Thr	Asn	Asn	Gln	Arg	Tyr	Met	Ala	Ala	Ile	Ile	Leu	Ser	
				165					170					175		
Glu	Lys	Gln	Cys	Arg	Asp	Gln	Phe	Lys	Asp	Met	Asn	Lys	Ser	Cys	Asp	
			180					185				190				
Ala	Leu	Leu	Phe	Met	Leu	Asn	Gln	Lys	Val	Lys	Thr	Leu	Glu	Val	Glu	
		195				200						205				
Ile	Ala	Lys	Glu	Lys	Thr	Ile	Cys	Thr	Lys	Asp	Lys	Glu	Ser	Val	Leu	
	210					215					220					
Leu	Asn	Lys	Arg	Val	Ala	Glu	Glu	Gln	Leu	Val	Glu	Cys	Val	Lys	Thr	
225				230						235					240	
Arg	Glu	Leu	Gln	His	Gln	Glu	Arg	Gln	Leu	Ala	Lys	Glu	Gln	Leu	Gln	
				245					250					255		
Lys	Val	Gln	Ala	Leu	Cys	Leu	Pro	Leu	Asp	Lys	Asp	Lys	Phe	Glu	Met	
			260					265					270			
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Ile	Arg	Arg	Ala	Cys	Asp	His	Met	Pro	Ser	Leu	Met	Ser	Ser	Lys	Val	
305				310						315					320	
Glu	Glu	Leu	Ala	Arg	Ser	Leu	Arg	Ala	Asp	Ile	Glu	Arg	Val	Ala	Arg	
				325					330					335		
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			340					345					350			
Arg	Ala	Ser	Gln	Glu	Ala	Lys	Gln	Lys	Val	Glu	Lys	Glu	Ala	Gln	Ala	
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Arg	Glu	Ala	Lys	Leu	Gln	Ala	Glu	Cys	Ser	Arg	Gln	Thr	Gln	Leu	Ala	
	370					375					380					
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470

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<211> 2084

<212> DNA

<213> Homo sapiens

<400> 3837

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<211> 468

<212> PRT

<213> Homo sapiens

<400> 3838

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			20					25					30		
Ser	His	Leu	Pro	Pro	Glu	His	Ser	Asp	Val	Val	Ile	Val	Gly	Gly	Gly
		35					40					45			
Val	Leu	Gly	Leu	Ser	Val	Ala	Tyr	Trp	Leu	Lys	Lys	Leu	Glu	Ser	Arg
		50				55					60				
Arg	Gly	Ala	Ile	Arg	Val	Leu	Val	Val	Glu	Arg	Asp	His	Thr	Tyr	Ser
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Gln	Ala	Ser	Thr	Gly	Leu	Ser	Val	Gly	Gly	Ile	Cys	Gln	Gln	Phe	Ser
				85					90					95	
Leu	Pro	Glu	Asn	Ile	Gln	Leu	Ser	Leu	Phe	Ser	Ala	Ser	Phe	Leu	Arg
			100					105					110		
Asn	Ile	Asn	Glu	Tyr	Leu	Ala	Val	Val	Asp	Ala	Pro	Pro	Leu	Asp	Leu
		115					120					125			
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		130				135					140				
Ala	Ala	Met	Glu	Ser	Asn	Val	Lys	Val	Gln	Arg	Gln	Glu	Gly	Ala	Lys
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Val	Ser	Leu	Met	Ser	Pro	Asp	Gln	Leu	Arg	Asn	Lys	Phe	Pro	Trp	Ile
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<210> 3839

<211> 758

<212> DNA

<213> Homo sapiens

<400> 3839

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<211> 252

<212> PRT

<213> Homo sapiens

<400> 3840

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		20						25					30		
Met	Glu	Tyr	Leu	Asn	Ser	Arg	Cys	Val	Leu	Phe	Thr	Tyr	Phe	Gln	Gly
		35					40					45			
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	50					55					60				
Ala	Ile	Thr	Leu	His	Pro	Glu	Ser	Ala	Ile	Ser	Lys	Ser	Lys	Met	Gly
65				70					75					80	
Leu	Thr	Pro	Leu	Trp	Arg	Asp	Ser	Ser	Ala	Leu	Ser	Ser	Gln	Arg	Asn
				85					90					95	
Ser	Phe	Pro	Thr	Ser	Phe	Trp	Thr	Ser	Ser	Tyr	Gln	Pro	Pro	Pro	Ala
			100					105					110		
Pro	Cys	Leu	Gly	Gly	Val	His	Pro	Asp	Phe	Gln	Val	Thr	Gly	Pro	Pro
	115						120					125			
Gly	Thr	Phe	Ser	Ala	Ala	Asp	Pro	Ser	Pro	Trp	Pro	Gly	His	Asn	Leu
	130					135						140			
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145				150						155				160	
Tyr	Pro	Leu	Thr	Ser	Gln	Val	Ser	Pro	Ser	Tyr	Ser	His	Met	His	Asp
				165					170					175	
Val	Tyr	Met	Arg	His	His	His	Pro	His	Ala	His	Met	His	His	Arg	His
			180					185						190	
Arg	His	His	His	His	His	His	His	Pro	Pro	Ala	Gly	Ser	Ala	Leu	Asp
	195						200					205			
Pro	Ser	Tyr	Gly	Pro	Leu	Leu	Met	Pro	Ser	Val	His	Ala	Ala	Arg	Ile
	210					215					220				
Pro	Ala	Pro	Gln	Cys	Asp	Ile	Thr	Lys	Thr	Glu	Pro	Thr	Thr	Val	Thr
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245

250

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 <211> 367
 <212> DNA
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 35 40 45
 Glu His Pro Asn Asp Val Arg Cys Ser Ser Thr Leu Val Thr His Ser
 50 55 60
 Lys Gly Tyr Glu Asn Gly Thr Asn Arg Leu Ser Leu Pro Lys Pro Ile
 65 70 75 80
 Leu Lys Ser Glu Lys Asn Lys Pro Leu Asp Pro Glu Met Gln Cys Leu
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<210> 3843
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<210> 3844

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3844

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			20					25				30			
Ser	Arg	Asn	Cys	Ser	Ala	Ser	Thr	Ser	Gln	Gly	Arg	Lys	Ala	Ser	Thr
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Lys	Gln	Lys	Ala	Arg	Arg	Arg	Thr	Arg	Ser	Ser	Ser	Ser	Ser	Ser	Ser
65				70						75				80	
Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser
			85					90				95			
Ser	Ser	Asp	Gly	Arg	Lys	Lys	Arg	Gly	Lys	Tyr	Lys	Asp	Lys	Arg	Arg
			100					105				110			
Lys	Lys	Lys	Lys	Lys	Arg	Lys	Lys	Leu	Lys	Lys	Lys	Gly	Lys	Glu	Lys
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<210> 3845

<211> 2302

<212> DNA

<213> Homo sapiens

<400> 3845

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<210> 3846

<211> 197

<212> PRT

<213> Homo sapiens

<400> 3846

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			20					25					30		
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		35					40					45			
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	50				55						60				
Gly	Ala	Arg	Glu	Arg	Gly	Gly	Arg	Gly	Gly	Arg	Gly	Ala	Gly	Gly	Gly
65					70					75				80	
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			85						90					95	
Gln	Arg	Ala	Ala	Ser	Arg	Ala	Gly	Cys	Gly	His	Arg	Gln	Leu	Gln	Arg
			100					105					110		
Ala	Pro	Ala	Pro	Gly	Leu	Arg	Gln	His	Pro	Cys	Gly	Ser	Gly	Thr	Glu
		115					120					125			
Gly	Leu	Arg	Gly	Gly	His	Leu	Ser	Glu	Thr	Val	Cys	Ala	His	Ala	Glu
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<210> 3847

<211> 1570

<212> DNA

<213> Homo sapiens

<400> 3847

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<211> 120

<212> PRT

<213> Homo sapiens

<400> 3848

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			20					25					30		
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		35					40					45			
Met	Asp	Asn	Val	Cys	Ile	Ile	Cys	Arg	Glu	Glu	Met	Val	Thr	Gly	Ala
	50					55					60				
Lys	Arg	Leu	Pro	Cys	Asn	His	Ile	Phe	His	Thr	Arg	Trp	Glu	Gly	Pro
65					70					75				80	
Trp	Gly	Ala	Cys	Pro	Ala	Gly	Pro	Arg	Pro	Gln	Lys	Ala	Gly	Pro	Lys
			85						90					95	
Gly	Pro	Ala	Asp	Leu	Cys	Leu	Ala	Leu	Thr	Arg	Ser	Cys	Leu	Arg	Ser
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			115				120								

<210> 3849

<211> 1139

<212> DNA

<213> Homo sapiens

<400> 3849

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<210> 3850

<211> 257

<212> PRT

<213> Homo sapiens

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			20					25					30		
Phe	Pro	Phe	Asn	Gln	Trp	Gly	Leu	Gln	Pro	Arg	Ser	Leu	Leu	Leu	Gln
		35				40					45				
Ala	Ala	Arg	Gly	Tyr	Val	Val	Arg	Lys	Pro	Ala	Gln	Ser	Arg	Leu	Asp
	50					55					60				
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Gly	Ile	Glu	Lys	Val	Asp	Asp	Val	Val	Lys	Arg	Leu	Leu	Ser	Leu	Glu
			85						90					95	
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		100						105						110	
Lys	Lys	Ile	Val	Ala	Asn	Pro	Glu	Asp	Thr	Arg	Ser	Leu	Glu	Ala	Arg
		115					120					125			
Ile	Ile	Ala	Leu	Ser	Val	Lys	Ile	Arg	Ser	Tyr	Glu	Glu	His	Leu	Glu
	130					135					140				
Lys	His	Arg	Lys	Asp	Lys	Ala	His	Lys	Arg	Tyr	Leu	Leu	Met	Ser	Ile
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<210> 3852

<211> 323

<212> PRT

<213> Homo sapiens

<400> 3852

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			20					25					30		
Trp	Ser	Ile	Ser	Ser	Arg	His	Val	Leu	Leu	Gln	Glu	Glu	Val	Ala	Glu
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Leu	Gln	Gly	Gln	Val	Gln	Arg	Thr	Glu	Val	Ala	Arg	Gly	Arg	Leu	Glu
	50					55					60				
Lys	Arg	Asn	Ser	Asp	Leu	Leu	Leu	Leu	Val	Asp	Thr	His	Lys	Lys	Gln
65					70					75					80
Ile	Asp	Gln	Lys	Glu	Ala	Asp	Tyr	Gly	Arg	Leu	Ser	Ser	Arg	Leu	Gln
				85					90					95	
Ala	Arg	Glu	Gly	Leu	Gly	Lys	Arg	Cys	Glu	Asp	Asp	Lys	Val	Lys	Leu
			100					105					110		
Gln	Asn	Asn	Ile	Ser	Tyr	Gln	Met	Ala	Asp	Ile	His	His	Leu	Lys	Glu
	115						120					125			
Gln	Leu	Ala	Glu	Leu	Arg	Gln	Glu	Phe	Leu	Arg	Gln	Glu	Asp	Gln	Leu
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<210> 3853
 <211> 375
 <212> DNA
 <213> Homo sapiens

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<210> 3854
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 <212> PRT
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<400> 3854
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 Gln Ile Tyr Lys Gln Leu Gln Glu Met Asp Glu Arg Arg Thr Ile Lys
 35 40 45
 Leu Ser Glu Cys Tyr Arg Gly Phe Ala Asp Ser Glu Arg Lys Val Ile
 50 55 60
 Pro Ile Ile Ser Lys Cys Leu Glu Gly Met Ile Leu Ala Ala Lys Ser
 65 70 75 80
 Val Asp Glu Arg Arg Asp Ser Gln Met Val Val Asp Ser Phe Lys Ser
 85 90 95
 Gly Phe Glu Pro Pro Gly Asp Phe Pro Phe Glu Asp Tyr Ser Gln His
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 Ile Tyr Arg Thr Ile Ser Asp Gly Thr Ile Ser Ala Ser
 115 120 125

<210> 3855
 <211> 1377
 <212> DNA
 <213> Homo sapiens

<400> 3855
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 120

cagaactgtg gctctggtgt ggttgggata gtggactatg gacctagacc caacaagagt
 180
 gaaatgtggg atgtcttctg ctatcggatg aaagatgtga actgcacctg caagggtggg
 240
 tatgtgggag atggcttctc atgcagtggg aacctgctgc aggtcctgat gtccttcccc
 300
 tcactcacia acttctctgac ggaagtgtct gcctattcca acagctcagc tcgaggccgt
 360
 gcatttctag aacacctgac tgacctgtcc atccgaggca ccctctttgt gccacagaac
 420
 agtgggctgg gggagaatga gaccttgtct gggcgggaca tcgagcacca cctcgccaat
 480
 gtcagcatgt ttttctacaa tgacctgtc aatggcacn accctgcaaa cgagggtggg
 540
 aagcaagctg ctcatcactg ccagccagga cccactnncc aaccgacgga gaccaggttt
 600
 gttgatggaa gagccattct gcagtgggac atctttgcct ccaatgggat cattcatgtc
 660
 atttccaggc ctttaaaagc acccctgcc cccgtgacct tgaccacac tggcttggga
 720
 gcagggatct tctttgccat catcctggtg actggggctg ttgccttggc tgcttactcc
 780
 tactttcgga taaaccggag aacaatcggc ttccagcatt ttgagtcgga agaggacatt
 840
 aatgttgag ctcttgga gacgagcct gagaatatct cgaaccctt gtatgagagc
 900
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 960
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 1020
 actcactgcc acctgggcca tcaactgtga attctcagca ccagttgcct tttaggaacg
 1080
 taaagtcctt taagcactca gaagccatac ctcatctctc tggctgatct gggggttgtt
 1140
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 1200
 ggctcttctt cctttgtact cttcagctgg cacctgctcc attctgccct acatgatggg
 1260
 taactgtgat ctttcttccc tgtttagattg taagcctccg tctttgtatc ccagccccta
 1320
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 1377

<210> 3856

<211> 330

<212> PRT

<213> Homo sapiens

<400> 3856

Xaa	Ala	Ala	Thr	Met	Ala	Thr	Tyr	Asn	Gln	Leu	Ser	Tyr	Ala	Gln	Lys
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Ala	Lys	Tyr	His	Leu	Cys	Ser	Ala	Gly	Trp	Leu	Glu	Thr	Gly	Arg	Val
			20					25					30		
Ala	Tyr	Pro	Thr	Ala	Phe	Ala	Ser	Gln	Asn	Cys	Gly	Ser	Gly	Val	Val

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      35              40              45
Gly Ile Val Asp Tyr Gly Pro Arg Pro Asn Lys Ser Glu Met Trp Asp
  50              55              60
Val Phe Cys Tyr Arg Met Lys Asp Val Asn Cys Thr Cys Lys Val Gly
  65              70              75              80
Tyr Val Gly Asp Gly Phe Ser Cys Ser Gly Asn Leu Leu Gln Val Leu
      85              90              95
Met Ser Phe Pro Ser Leu Thr Asn Phe Leu Thr Glu Val Leu Ala Tyr
      100              105              110
Ser Asn Ser Ser Ala Arg Gly Arg Ala Phe Leu Glu His Leu Thr Asp
      115              120              125
Leu Ser Ile Arg Gly Thr Leu Phe Val Pro Gln Asn Ser Gly Leu Gly
      130              135              140
Glu Asn Glu Thr Leu Ser Gly Arg Asp Ile Glu His His Leu Ala Asn
  145              150              155              160
Val Ser Met Phe Phe Tyr Asn Asp Leu Val Asn Gly Thr Xaa Pro Ala
      165              170              175
Asn Glu Gly Gly Lys Gln Ala Ala His His Cys Gln Pro Gly Pro Thr
      180              185              190
Xaa Gln Pro Thr Glu Thr Arg Phe Val Asp Gly Arg Ala Ile Leu Gln
      195              200              205
Trp Asp Ile Phe Ala Ser Asn Gly Ile Ile His Val Ile Ser Arg Pro
      210              215              220
Leu Lys Ala Pro Pro Ala Pro Val Thr Leu Thr His Thr Gly Leu Gly
  225              230              235              240
Ala Gly Ile Phe Phe Ala Ile Ile Leu Val Thr Gly Ala Val Ala Leu
      245              250              255
Ala Ala Tyr Ser Tyr Phe Arg Ile Asn Arg Arg Thr Ile Gly Phe Gln
      260              265              270
His Phe Glu Ser Glu Glu Asp Ile Asn Val Ala Ala Leu Gly Lys Gln
      275              280              285
Gln Pro Glu Asn Ile Ser Asn Pro Leu Tyr Glu Ser Thr Thr Ser Ala
      290              295              300
Pro Pro Glu Pro Ser Tyr Asp Pro Phe Thr Asp Ser Glu Glu Arg Gln
  305              310              315              320
Leu Glu Gly Asn Asp Pro Leu Arg Thr Leu
      325              330

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<210> 3857

<211> 797

<212> DNA

<213> Homo sapiens

<400> 3857

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  120
ccttcacca ggtcctgggc gagaagcata agcgcggcca cctggccgag gccgagggcc
  180
acagggacac ttgcgacgaa gactcggtag ccggcgagtc ggaccgcata gacgatggca
  240
ctgttaatgg ccgcggctgc tccccgggag agtcgggcctc ggggggcctg tccaaaaagc
  300

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tgctgctggg cagccccagc tcgctgagcc ctttctctaa gcgcatcaag ctcgagaagg
 360
 agttcgacct gcccccgcc gcgatgccc acacggagaa cgtgtactcg cagtggctcg
 420
 ccggctacgc ggcctccagg cagctcaaag atcccttctt tagcttcgga gactccagac
 480
 aatcgctttt tgcctcctcg tcggagcact ctcggagaa cgggagcttg cgcttctcca
 540
 caccgcccgg ggagctggac ggagggatct cggggcgag cggcacggga agtggaggga
 600
 gcacgccccca tattagtggc ccgggcccgg gcaggcccag ctcaaaagag ggcagacgca
 660
 gcgacacttg ttcttcacac accccattc ggcgtagtac ccagagagct caagatgtgt
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 780
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 797

<210> 3858
 <211> 76
 <212> PRT
 <213> Homo sapiens

<400> 3858
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 20 25 30
 Ala Pro Cys Ser Thr Ser Ala Arg Pro Ser Thr Arg Ser Trp Ala Arg
 35 40 45
 Ser Ile Ser Ala Ala Thr Trp Pro Arg Pro Arg Ala Thr Gly Thr Leu
 50 55 60
 Ala Thr Lys Thr Arg Trp Pro Ala Ser Arg Thr Ala
 65 70 75

<210> 3859
 <211> 1449
 <212> DNA
 <213> Homo sapiens

<400> 3859
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 120
 tttgaagctc ggagtaaaac tgcttgcaag cacctctgga agtgcagtgt ggaacatcat
 180
 acatttttta gaatgccaga aaatgaatcc aattcactgt caagaaaact cagcaagttt
 240
 ggatccatac gttataagca ccgctacagt ggcaggacag ctttgcaaact gagccgagat
 300
 ctttctattc agcttccccg gcctgatcag aatgtgacaa gaagtcgaag caagacttac
 360

cctaagcgaa tagcacaaac acagccagct gaatcaaaca ccatcagtag gataactgca
 420
 aacatggaaa atggagaaaa tgaaggaaca attaaaatta ttgcaccttc accagtaaaa
 480
 agctttaaga aagcaaagaa tgaaaatagc cctgataccc aaagaagcaa atctcatgca
 540
 ccgtgggaag aaaatggccc ccagagtgga ctctacaatt ctcccagtga tcgcactaag
 600
 tcgccaaagt tcccttacac gcgtcgccga aacccctcct gtggaagtga caatgattct
 660
 gtacagcctg tgaggaggag gaaagcccat aacagtgggtg aagattcaga tcttaagcaa
 720
 aggaggaggt cacgttcacg ctgtaacacc agcagtggta gtgaatcaga aaattcta
 780
 agagaacacc ggaaaaagag aaacagaata cggcaggaga atgatatggt tgattcagcg
 840
 cctcagtggg aagctgtatt aaggagacaa aaggaaaaaa accaagccga cccaacaac
 900
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 960
 tggaagcaca ttcaaaaaga acttgtggat ccatccggat tgtccgaaga acaattaaaa
 1020
 gagattccat aactaaaaat agagtgagtg ctttcagaa tcttctcacc aaagctttat
 1080
 tagtgcttga cacaagggtga cccaatccgc atcaggcatt ctcatcgcgc acgaagttac
 1140
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 1200
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 1260
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 1320
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 1380
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 1440
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 1449

<210> 3860

<211> 348

<212> PRT

<213> Homo sapiens

<400> 3860

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Lys	Val	His	Phe	Lys	Glu	Thr	Gln	Phe	Glu	Leu	Arg	Val	Leu	Gly	Lys
			20					25					30		
Asp	Cys	Asn	Glu	Thr	Ser	Phe	Phe	Phe	Glu	Ala	Arg	Ser	Lys	Thr	Ala
		35					40					45			
Cys	Lys	His	Leu	Trp	Lys	Cys	Ser	Val	Glu	His	His	Thr	Phe	Phe	Arg
	50					55				60					
Met	Pro	Glu	Asn	Glu	Ser	Asn	Ser	Leu	Ser	Arg	Lys	Leu	Ser	Lys	Phe

65					70					75				80	
Gly	Ser	Ile	Arg	Tyr	Lys	His	Arg	Tyr	Ser	Gly	Arg	Thr	Ala	Leu	Gln
				85					90					95	
Met	Ser	Arg	Asp	Leu	Ser	Ile	Gln	Leu	Pro	Arg	Pro	Asp	Gln	Asn	Val
			100					105					110		
Thr	Arg	Ser	Arg	Ser	Lys	Thr	Tyr	Pro	Lys	Arg	Ile	Ala	Gln	Thr	Gln
		115					120					125			
Pro	Ala	Glu	Ser	Asn	Thr	Ile	Ser	Arg	Ile	Thr	Ala	Asn	Met	Glu	Asn
	130					135					140				
Gly	Glu	Asn	Glu	Gly	Thr	Ile	Lys	Ile	Ile	Ala	Pro	Ser	Pro	Val	Lys
145					150					155					160
Ser	Phe	Lys	Lys	Ala	Lys	Asn	Glu	Asn	Ser	Pro	Asp	Thr	Gln	Arg	Ser
				165					170					175	
Lys	Ser	His	Ala	Pro	Trp	Glu	Glu	Asn	Gly	Pro	Gln	Ser	Gly	Leu	Tyr
		180						185					190		
Asn	Ser	Pro	Ser	Asp	Arg	Thr	Lys	Ser	Pro	Lys	Phe	Pro	Tyr	Thr	Arg
		195					200					205			
Arg	Arg	Asn	Pro	Ser	Cys	Gly	Ser	Asp	Asn	Asp	Ser	Val	Gln	Pro	Val
	210					215					220				
Arg	Arg	Arg	Lys	Ala	His	Asn	Ser	Gly	Glu	Asp	Ser	Asp	Leu	Lys	Gln
225					230					235					240
Arg	Arg	Arg	Ser	Arg	Ser	Arg	Cys	Asn	Thr	Ser	Ser	Gly	Ser	Glu	Ser
			245						250					255	
Glu	Asn	Ser	Asn	Arg	Glu	His	Arg	Lys	Lys	Arg	Asn	Arg	Ile	Arg	Gln
			260					265					270		
Glu	Asn	Asp	Met	Val	Asp	Ser	Ala	Pro	Gln	Trp	Glu	Ala	Val	Leu	Arg
	275						280					285			
Arg	Gln	Lys	Glu	Lys	Asn	Gln	Ala	Asp	Pro	Asn	Asn	Arg	Arg	Ser	Arg
	290					295					300				
His	Arg	Ser	Arg	Ser	Arg	Ser	Pro	Asp	Ile	Gln	Ala	Lys	Glu	Glu	Leu
305					310					315					320
Trp	Lys	His	Ile	Gln	Lys	Glu	Leu	Val	Asp	Pro	Ser	Gly	Leu	Ser	Glu
			325						330					335	
Glu	Gln	Leu	Lys	Glu	Ile	Pro	Tyr	Thr	Lys	Ile	Glu				
			340					345							

<210> 3861

<211> 748

<212> DNA

<213> Homo sapiens

<400> 3861

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gccaccatgt cgggagacaa acttctgagc gaactcgggt ataagctggg ccgcacaatt

120

ggagagggca gctactccaa ggtgaagggt gccacatcca agaagtacaa ggggtaccgtg

180

gccatcaagg tgggtggaccg gcggcgagcg ccccgaggact tcgtcaacaa gttcctgccc

240

cgagagctgt ccactctgcg gggcggtcga caccgcaca tcgtgcacgt cttcgagttc

300

atcgaggtgt gcaacgggaa actgtacatc gtgatggaag cggccgccac cgacctgctg

360

caagccgtgc agcgcaacgg ggcgcatcccc ggagttcagg cgcgcgacct ctttgcgag
 420
 atcgccggcg ccgtgcgcta cctgcacgat catcacctgg tgcaccgga cctcaagtgc
 480
 gaaaacgtgc tgctgagccc ggacgagcgc cgcgtcaagc tcaccgactt cggcttcggc
 540
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 600
 acccgagtca tgcatttctt gagcacctac tgtctgccag gccccagagc tcatggcgaa
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 748

<210> 3862

<211> 210

<212> PRT

<213> Homo sapiens

<400> 3862

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Thr	Ile	Gly	Glu	Gly	Ser	Tyr	Ser	Lys	Val	Lys	Val	Ala	Thr	Ser	Lys
		20						25					30		
Lys	Tyr	Lys	Gly	Thr	Val	Ala	Ile	Lys	Val	Val	Asp	Arg	Arg	Arg	Ala
		35					40					45			
Pro	Pro	Asp	Phe	Val	Asn	Lys	Phe	Leu	Pro	Arg	Glu	Leu	Ser	Ile	Leu
		50				55					60				
Arg	Gly	Val	Arg	His	Pro	His	Ile	Val	His	Val	Phe	Glu	Phe	Ile	Glu
65					70				75					80	
Val	Cys	Asn	Gly	Lys	Leu	Tyr	Ile	Val	Met	Glu	Ala	Ala	Ala	Thr	Asp
		85							90					95	
Leu	Leu	Gln	Ala	Val	Gln	Arg	Asn	Gly	Arg	Ile	Pro	Gly	Val	Gln	Ala
		100						105					110		
Arg	Asp	Leu	Phe	Ala	Gln	Ile	Ala	Gly	Ala	Val	Arg	Tyr	Leu	His	Asp
		115					120					125			
His	His	Leu	Val	His	Arg	Asp	Leu	Lys	Cys	Glu	Asn	Val	Leu	Leu	Ser
		130				135					140				
Pro	Asp	Glu	Arg	Arg	Val	Lys	Leu	Thr	Asp	Phe	Gly	Phe	Gly	Arg	Gln
145					150					155				160	
Ala	His	Gly	Tyr	Pro	Asp	Leu	Ser	Thr	Thr	Tyr	Cys	Gly	Ser	Ala	Val
			165						170					175	
Arg	Val	Thr	Arg	Val	Met	His	Phe	Leu	Ser	Thr	Tyr	Cys	Leu	Pro	Gly
		180						185					190		
Pro	Arg	Ala	His	Gly	Glu	Glu	Thr	Trp	Ala	His	Pro	Cys	Arg	Lys	Arg
		195					200					205			
Asp	Asn														
	210														

<210> 3863

<211> 341

<212> DNA

<213> Homo sapiens

<400> 3863

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 120
 agttttgctc tcagttggga ctctgggaaa aaaactgtgt ggctgatctc cagcaggttc
 180
 ttctggtcga ggctccccga gaaccatctg gccatgggct ggcagccgag ttctcgcagt
 240
 gtccaggctg acggtacatt ccaggctagc catcctatca taatcgaatc tgagtagatt
 300
 tttatcaatc gcttgggaca agccattgaa ttttcggaga g
 341

<210> 3864

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3864

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Ile	Gly	Trp	Leu	Ala	Trp	Asn	Val	Pro	Ser	Ala	Trp	Thr	Leu	Arg	Glu
			20					25					30		
Leu	Gly	Cys	Gln	Pro	Met	Ala	Arg	Trp	Phe	Ser	Gly	Ser	Leu	Asp	Gln
		35					40					45			
Lys	Asn	Leu	Val	Glu	Ile	Ser	His	Thr	Val	Phe	Phe	Pro	Glu	Ser	Gln
	50					55				60					
Leu	Arg	Ala	Lys	Leu	Lys	Cys	Pro	Gly	Gly	Ser	Cys	Thr	Pro	Gly	Leu
65					70				75					80	
Lys	Lys	Ile	Gly	Ser	Leu	Lys	Val	Ser	Cys	Glu	Glu	Phe	Leu	Leu	Met
			85					90					95		
Gly	Leu	Arg	Tyr	Gln	His	Leu	Asp	Pro	Pro	Ser	Arg				
			100					105							

<210> 3865

<211> 492

<212> DNA

<213> Homo sapiens

<400> 3865

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 120
 gagacctatg tgaagcccac ttaattttct gaaacttcac atcatgtacc ttcatgttaa
 180
 tattctgaca cttgtttcat gcagccatac cagtcacaac tttaaatttt tagtcagact
 240
 ttgctcaciaa ggtttcagga taattaatac aaatggtttg ggccagccat cacacagcag
 300
 tctcctatctt acttcactac aactacagct ttcattcttc attacattac tttttctgag
 360

tagtctgggt caaatagtac aaactgaata ttccttaacc aaaatgcttg gaagtaggcc
 420
 gggagcagcg gctcaccctt gtaatcccag cattttggga ggccaaagca gacagatcac
 480
 tcaaggtcag ca
 492

<210> 3866
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 3866
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 Ile Ile Asn Thr Asn Gly Leu Gly Gln Pro Ser His Ser Ser Leu Leu
 35 40 45
 Phe Thr Ser Leu Gln Leu Gln Leu Ser Phe Phe Ile Thr Leu Leu Phe
 50 55 60
 Leu Ser Ser Leu Gly Gln Ile Val Gln Thr Glu Tyr Ser Leu Thr Lys
 65 70 75 80
 Met Leu Gly Ser Arg Pro Gly Ala Ala Ala His Pro Cys Asn Pro Ser
 85 90 95
 Ile Leu Gly Gly Gln Ser Arg Gln Ile Thr Gln Gly Gln
 100 105

<210> 3867
 <211> 1032
 <212> DNA
 <213> Homo sapiens

<400> 3867
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 120
 ctggacagtg caaagcgatc ggaggacagg gagaagggag ctctgattga ggagctctta
 180
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 240
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 300
 catgatcagg agatggacaa gctgaaggag caatatgatg ctgagttgca ggccctgagg
 360
 gagagtgtgg aagaagcaac caagaatgtc gaggtcttgg cgagcaggag caacacttca
 420
 gagcaagacc aggcggggac tgaaatgcgc gtgaagcttc tgcaggagga gaatgagaag
 480
 ctgcagggaa gaagcgaaga gctggagcgg agagttgctc agcttcaaag gcagatcgag
 540
 gacctgaaag gcgatgaagc caaggcgaag gaaacgctga agaagtacga gggagaaata
 600

cgacagttag aggaggccct tgtgcacgcc agaaaggaag aaaaagaagc tgtgtcagcc
 660
 agaagggccc tggagaatga actggaggct gctcagggaa atctgagtca gactacccag
 720
 gacgagaagc agttgtctga gaagctcaaa gaggagagtg agcagaagga gcagctaaga
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 900
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 960
 aaggagaaaa cgctggaggc agaaaagtcc cgactgacag ccatgaaaat gcaggatgag
 1020
 atgcgtctga tg
 1032

<210> 3868

<211> 344

<212> PRT

<213> Homo sapiens

<400> 3868

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Lys	Met	Glu	Arg	Glu	Gln	His	Gln	Thr	Glu	Ile	Arg	Asp	Leu	Gln	Asp
			20					25					30		
Gln	Leu	Ser	Glu	Met	His	Asp	Glu	Leu	Asp	Ser	Ala	Lys	Arg	Ser	Glu
		35					40					45			
Asp	Arg	Glu	Lys	Gly	Ala	Leu	Ile	Glu	Glu	Leu	Leu	Gln	Ala	Lys	Gln
	50					55					60				
Asp	Leu	Gln	Asp	Leu	Leu	Ile	Ala	Lys	Glu	Glu	Gln	Glu	Asp	Leu	Leu
65					70				75						80
Arg	Lys	Arg	Glu	Arg	Glu	Leu	Thr	Ala	Leu	Lys	Gly	Ala	Leu	Lys	Glu
				85				90						95	
Glu	Val	Ser	Ser	His	Asp	Gln	Glu	Met	Asp	Lys	Leu	Lys	Glu	Gln	Tyr
			100					105					110		
Asp	Ala	Glu	Leu	Gln	Ala	Leu	Arg	Glu	Ser	Val	Glu	Glu	Ala	Thr	Lys
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Leu	Gln	Gly	Arg	Ser	Glu	Glu	Leu	Glu	Arg	Arg	Val	Ala	Gln	Leu	Gln
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Arg	Gln	Ile	Glu	Asp	Leu	Lys	Gly	Asp	Glu	Ala	Lys	Ala	Lys	Glu	Thr
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Leu	Lys	Lys	Tyr	Glu	Gly	Glu	Ile	Arg	Gln	Leu	Glu	Glu	Ala	Leu	Val
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His	Ala	Arg	Lys	Glu	Glu	Lys	Glu	Ala	Val	Ser	Ala	Arg	Arg	Ala	Leu
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Glu	Asn	Glu	Leu	Glu	Ala	Ala	Gln	Gly	Asn	Leu	Ser	Gln	Thr	Thr	Gln
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Glu	Gln	Lys	Gln	Leu	Ser	Glu	Lys	Leu	Lys	Glu	Glu	Ser	Glu	Gln	Lys

				245					250					255					
Glu	Gln	Leu	Arg	Arg	Leu	Lys	Asn	Glu	Met	Glu	Asn	Glu	Arg	Trp	His				
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Leu	Gly	Lys	Thr	Ile	Glu	Lys	Leu	Gln	Lys	Glu	Met	Ala	Asp	Ile	Val				
		275					280					285							
Glu	Ala	Ser	Arg	Thr	Ser	Thr	Leu	Glu	Leu	Gln	Asn	Gln	Leu	Asp	Glu				
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Tyr	Lys	Glu	Lys	Asn	Arg	Arg	Glu	Leu	Ala	Glu	Met	Gln	Arg	Gln	Leu				
305					310					315				320					
Lys	Glu	Lys	Thr	Leu	Glu	Ala	Glu	Lys	Ser	Arg	Leu	Thr	Ala	Met	Lys				
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 <212> DNA
 <213> Homo sapiens

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 240
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1080
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1226

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<212> PRT
<213> Homo sapiens

<400> 3870
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35 40 45
Pro Gly Trp Gly Thr Val Cys Gly His Glu Ala Arg Pro Pro Pro Ala
50 55 60
Pro Leu Pro Arg Gly Ser Ser Ile Pro Leu His Phe Trp Asn Val Cys
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Ala Ser Met Met Phe Val Tyr Leu Arg His Leu Lys Ile Tyr Phe Arg
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Tyr Glu Gly Lys
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<210> 3871
<211> 473
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<213> Homo sapiens

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473

<210> 3872

<211> 66
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 <213> Homo sapiens

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 35 40 45
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 Asp Leu
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<210> 3873
 <211> 869
 <212> DNA
 <213> Homo sapiens

<400> 3873
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<210> 3874

<211> 289
 <212> PRT
 <213> Homo sapiens

<400> 3874

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Glu Ala Tyr His Leu Ser Phe Glu Arg Arg Gln Lys Ser Ser Glu Ala
          35           40           45
Pro Val Gln Ser Pro Gln Arg Ser Val Asp Ser Ile Ser Gln Glu Ser
          50           55           60
Ser Thr Ser Ser Phe Ser Ser Met Ser Ala Gly Ser Arg Gln Glu Glu
65           70           75           80
Thr Lys Lys Asp Tyr Arg Glu Val Glu Lys Leu Leu Arg Ala Val Ala
          85           90           95
Asp Gly Asp Leu Glu Met Val Arg Tyr Leu Leu Glu Trp Thr Glu Glu
          100          105          110
Asp Leu Glu Asp Ala Glu Asp Thr Val Ser Ala Ala Asp Pro Glu Phe
          115          120          125
Cys His Pro Leu Cys Gln Cys Pro Lys Cys Ala Pro Ala Gln Lys Arg
          130          135          140
Leu Ala Lys Val Pro Ala Ser Gly Leu Gly Val Asn Val Thr Ser Gln
145          150          155          160
Asp Gly Ser Ser Pro Leu His Val Ala Ala Leu His Gly Arg Ala Asp
          165          170          175
Leu Ile Arg Leu Leu Lys His Gly Ala Asn Ala Gly Ala Arg Asn
          180          185          190
Ala Asp Gln Ala Val Pro Leu His Leu Ala Cys Gln Gln Gly His Phe
          195          200          205
Gln Val Val Lys Cys Leu Leu Asp Ser Asn Ala Lys Pro Asn Lys Lys
          210          215          220
Asp Leu Ser Gly Asn Thr Pro Leu Ile Tyr Ala Cys Ser Gly Gly His
225          230          235          240Glu Leu
Val Ala Leu Leu Leu Gln His Gly Ala Ser Ile Asn Ala
          245          250          255
Leu Thr Ile Arg Gly Asn Thr Ala Leu His Glu Ala Val Ile Glu Lys
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<210> 3875
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 <212> DNA
 <213> Homo sapiens

<400> 3875

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120

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<210> 3876

<211> 824

<212> PRT

<213> Homo sapiens

<400> 3876

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			20					25					30	Val
Pro	Pro	Ala	Ala	Leu	Gly	Leu	Val	Ser	Ser	Arg	Thr	Ser	Gly	Ala
			35				40					45		Val
Pro	Pro	Lys	Glu	Glu	Glu	Leu	Arg	Ala	Ala	Val	Glu	Val	Leu	Arg
			50			55					60			Gly
His	Gly	Leu	His	Ser	Val	Leu	Glu	Glu	Trp	Phe	Val	Glu	Val	Leu
65					70				75					80
Asn	Asp	Leu	Gln	Ala	Asn	Ile	Ser	Pro	Glu	Phe	Trp	Asn	Ala	Ile
				85					90					95
Gln	Cys	Glu	Asn	Ser	Ala	Asp	Glu	Pro	Gln	Cys	Leu	Leu	Leu	Leu
			100					105				110		
Asp	Ala	Phe	Gly	Leu	Leu	Glu	Ser	Arg	Leu	Asp	Pro	Tyr	Leu	Arg
			115				120					125		Ser
Leu	Glu	Leu	Leu	Glu	Lys	Trp	Thr	Arg	Leu	Gly	Leu	Leu	Met	Gly
														Thr

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Leu Phe Phe Ser Thr Pro Arg	Thr Phe Gln Glu Met Ile Gln Arg	Leu			
		165		170	175
Tyr Gly Cys Phe Leu Arg	Val Tyr Met Gln Ser Lys Arg	Lys Gly Glu			
		180		185	190
Gly Gly Thr Asp Pro Glu Leu	Glu Gly Glu Leu Asp Ser Arg	Tyr Ala			
		195		200	205
Arg Arg Arg Tyr Tyr Arg	Leu Leu Gln Ser Pro Leu Cys	Ala Gly Cys			
		210		215	220
Ser Ser Asp Lys Gln Gln Cys	Trp Cys Arg Gln Ala Leu	Glu Gln Phe			
		225		230	235
His Gln Leu Ser Gln Val Leu	His Arg Leu Ser Leu Leu	Glu Arg Val			
		245		250	255
Ser Ala Glu Ala Val Thr Thr	Thr Thr Leu His Gln Val Thr	Arg Glu Arg			
		260		265	270
Met Glu Asp Arg Cys Arg Gly	Glu Tyr Glu Arg Ser Phe Leu	Arg Glu			
		275		280	285
Phe His Arg Trp Ile Glu Arg	Val Val Gly Trp Leu Gly	Lys Val Phe			
		290		295	300
Leu Gln Asp Gly Pro Ala Arg	Pro Ala Ser Pro Glu Ala Gly	Asn Thr			
		305		310	315
Leu Arg Arg Trp Arg Cys His	Val Gln Arg Phe Phe Tyr	Arg Ile Tyr			
		325		330	335
Ala Ser Leu Arg Ile Glu Glu	Leu Phe Ser Ile Val Arg	Asp Phe Pro			
		340		345	350
Asp Ser Arg Pro Ala Ile Glu	Asp Leu Lys Tyr Cys Leu	Glu Arg Thr			
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Asp Gln Arg Gln Gln Leu Leu	Val Ser Leu Lys Ala Ala Leu	Glu Thr			
		370		375	380
Arg Leu Leu His Pro Gly Val	Asn Thr Cys Asp Ile Ile Thr	Leu Tyr			
		385		390	395
Ile Ser Ala Ile Lys Ala Leu	Arg Val Leu Asp Pro Ser Met	Val Ile			
		405		410	415
Leu Glu Val Ala Cys Glu Pro	Ile Arg Arg Tyr Leu Arg	Thr Arg Glu			
		420		425	430
Asp Thr Val Arg Gln Ile Val	Ala Gly Leu Thr Gly Asp Ser	Asp Gly			
		435		440	445
Thr Gly Asp Leu Ala Val Glu	Leu Ser Lys Thr Asp Pro	Ala Ser Leu			
		450		455	460
Glu Thr Gly Gln Asp Ser Glu	Asp Asp Ser Gly Glu Pro	Glu Asp Trp			
		465		470	475
Val Pro Asp Pro Val Asp Ala	Asp Pro Gly Lys Ser Ser Ser	Lys Arg			
		485		490	495
Arg Ser Ser Asp Ile Ile Ser	Leu Leu Val Ser Ile Tyr Gly	Ser Lys			
		500		505	510
Asp Leu Phe Ile Asn Glu Tyr	Arg Ser Leu Leu Ala Asp	Arg Leu Leu			
		515		520	525
His Gln Phe Ser Phe Ser Pro	Glu Arg Glu Ile Arg Asn	Val Glu Leu			
		530		535	540
Leu Lys Leu Arg Phe Gly Glu	Ala Pro Met His Phe Cys	Glu Val Met			
		545		550	555
Leu Lys Asp Met Ala Asp Ser	Arg Arg Ile Asn Ala Asn	Ile Arg Glu			

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Thr	Leu	Gly	Leu	Val	Thr	Met	Asp	Val	Glu	Leu	Ala	Asp	Arg	Thr	Leu												
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Ser	Val	Ala	Val	Thr	Pro	Val	Gln	Ala	Val	Ile	Leu	Leu	Tyr	Phe	Gln												
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Val	Leu	Arg	Glu	Xaa	Ser	Pro	Pro	Ala	Pro	Ser	Leu	Ser	Leu	Arg	Arg												
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Glu	Ser	Asp	Ser	Gly	Met	Ala	Ser	Gln	Ala	Asp	Gln	Lys	Glu	Glu	Glu												
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Leu	Leu	Leu	Phe	Trp	Thr	Tyr	Ile	Gln	Ala	Met	Leu	Thr	Asn	Leu	Glu												
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Ser	Leu	Ser	Leu	Asp	Arg	Ile	Tyr	Asn	Met	Leu	Arg	Met	Phe	Val	Val												
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Thr	Gly	Pro	Ala	Leu	Ala	Glu	Ile	Asp	Leu	Gln	Glu	Leu	Gln	Gly	Tyr												
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Leu	Gln	Lys	Lys	Val	Arg	Asp	Gln	Gln	Leu	Val	Tyr	Ser	Ala	Gly	Val												
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<212> DNA
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<210> 3878

<211> 370

<212> PRT

<213> Homo sapiens

<400> 3878

Xaa	Asn	Ser	Met	Lys	His	Glu	Asp	Pro	Ser	Ile	Ile	Ser	Met	Glu	Asp
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			20					25					30		
His	Ala	Lys	Lys	Ala	Asn	Gly	Pro	Asn	Tyr	Ile	Gln	Pro	Gln	Lys	Arg
			35					40					45		
Gln	Thr	Thr	Phe	Glu	Ser	Gln	Asp	Arg	Lys	Ala	Val	Ser	Pro	Ser	Ser
			50					55					60		
Ser	Glu	Lys	Arg	Ser	Lys	Asn	Pro	Ile	Ser	Arg	Pro	Leu	Glu	Gly	Lys
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Lys	Ser	Leu	Ser	Leu	Ser	Ala	Lys	Thr	His	Asn	Ile	Gly	Phe	Asp	Lys
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Asp	Ser	Cys	His	Ser	Thr	Thr	Lys	Thr	Glu	Ala	Ser	Gln	Glu	Glu	Arg
Ser	Asp	Ser	Ser	Gly	Leu	Thr	Ser	Leu	Lys	Lys	Ser	Pro	Lys	Val	Ser
Ser	Lys	Asp	Thr	Arg	Glu	Ile	Lys	Thr	Asp	Phe	Ser	Leu	Ser	Ile	Ser
Asn	Ser	Ser	Asp	Val	Ser	Ala	Lys	Asp	Lys	His	Ala	Glu	Asp	Asn	Glu
Lys	Arg	Leu	Ala	Ala	Leu	Glu	Ala	Arg	Gln	Lys	Ala	Lys	Glu	Val	Gln
Lys	Lys	Leu	Val	His	Asn	Ala	Leu	Ala	Asn	Leu	Asp	Gly	His	Pro	Glu

180 185 190
 Asp Lys Pro Thr His Ile Ile Phe Gly Ser Asp Ser Glu Cys Glu Thr
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 210 215 220
 Lys Glu Ser Met Gly Lys Thr Ser Gly Lys Leu Phe Asp Ser Ser Asp
 225 230 235 240
 Asp Glu Glu Ser Asp Ser Glu Asp Asp Ser Asn Arg Phe Lys Ile Lys
 245 250 255
 Pro Gln Phe Glu Gly Arg Ala Gly Gln Lys Leu Met Asp Leu Gln Ser
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 His Phe Gly Thr Asp Asp Arg Phe Arg Met Asp Ser Arg Phe Leu Glu
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 Thr Asp Ser Glu Glu Glu Gln Glu Glu Val Asn Glu Lys Lys Thr Ala
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 Glu Glu Glu Glu Leu Ala Glu Glu Lys Lys Lys Ala Leu Asn Val Val
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<210> 3879

<211> 2769

<212> DNA

<213> Homo sapiens

<400> 3879

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2280

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<210> 3880
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 <212> PRT
 <213> Homo sapiens

<400> 3880
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 Ala Ile Asp Leu Ser Arg Asn Gln Phe Gln Asp Phe Pro Glu Gln Leu
 35 40 45
 Thr Ala Leu Pro Ala Leu Glu Thr Ile Asn Leu Glu Glu Asn Glu Ile
 50 55 60
 Val Asp Val Pro Val Glu Lys Leu Ala Ala Met Pro Ala Leu Arg Ser
 65 70 75 80
 Ile Asn Leu Arg Phe Asn Pro Leu Asn Ala Glu Val Arg Val Ile Ala
 85 90 95
 Pro Pro Leu Ile Lys Phe Asp Met Leu Met Ser Pro Glu Gly Ala Arg
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 Ala Pro Leu Pro
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<210> 3881
 <211> 1393
 <212> DNA
 <213> Homo sapiens

<400> 3881
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<210> 3882

<211> 277

<212> PRT

<213> Homo sapiens

<400> 3882

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			20				25					30			
Gln	Met	Pro	Ser	Leu	Asn	Trp	Pro	Glu	Ala	Leu	Pro	Pro	Pro	Pro	Pro

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 Ser Ser Glu Pro Glu Glu Trp Cys Pro Pro Met Pro Glu Arg Ser His
 65 70 75 80
 Leu Thr Glu Pro Ser Ser Ser Gly Gly Trp Leu Val Thr Pro Ser Arg
 85 90 95
 Arg Glu Thr Pro Ser Pro Thr Pro Ser Tyr Gly Gln Gln Ser Thr Ala
 100 105 110
 Thr Leu Thr Pro Ser Pro Pro Asp Pro Pro Gln Pro Pro Thr Asp Met
 115 120 125
 Pro His Leu His Gln Met Pro Arg Arg Val Pro Leu Gly Pro Ser Ser
 130 135 140
 Pro Leu Ser Val Ser Gln Pro Met Leu Gly Ile Arg Glu Ala Arg Pro
 145 150 155 160
 Ala Gly Leu Gly Ala Gly Pro Ala Ala Ser Pro His Leu Ser Pro Ser
 165 170 175
 Pro Ala Pro Ser Thr Ala Ser Ser Ala Pro Gly Arg Thr Trp Gln Gly
 180 185 190
 Asn Gly Glu Met Thr Pro Pro Leu Gln Gly Pro Arg Ala Arg Phe Arg
 195 200 205
 Lys Lys Pro Lys Ala Leu Pro Tyr Arg Arg Glu Asn Ser Pro Gly Asp
 210 215 220
 Leu Pro Pro Pro Pro Leu Pro Pro Pro Glu Xaa Arg Gly Glu Leu Gly
 225 230 235 240
 Pro Arg Ala Glu Gly Ser Arg Gln His Val Leu Pro Gly Ala Gly Ala
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 Gly Ala Pro Pro Arg
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<210> 3883

<211> 943

<212> DNA

<213> Homo sapiens

<400> 3883

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 480

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<210> 3884

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3884

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			20					25					30		
Lys	Ala	Arg	Arg	Arg	Thr	Arg	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser
		35					40					45			
Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser
		50				55					60				
Asp	Gly	Arg	Lys	Lys	Arg	Gly	Lys	Tyr	Lys	Asp	Lys	Arg	Arg	Lys	Lys
65					70					75				80	
Lys	Lys	Lys	Arg	Lys	Lys	Leu	Lys	Lys	Lys	Gly	Lys	Glu	Lys	Ala	Glu
			85					90						95	
Ala	Gln	Gln	Val	Glu	Ala	Leu	Pro	Gly	Pro	Ser	Leu	Asp	Gln	Trp	His
			100					105					110		
Arg	Ser	Ala	Gly	Glu	Glu	Glu	Asp	Gly	Pro	Val	Leu	Thr	Asp	Glu	Gln
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Val	Pro	Asn	Pro	Gly	His	Glu	Ala	His	Asp	Gln	Gly	Gly	Trp	Asp	Ala
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Arg	Gln	Ser	Val	Ile	Arg	Lys	Val	Val	Asp	Pro	Glu	Thr	Gly	Arg	Thr
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Arg	Leu	Ile	Lys	Gly	Asp	Gly	Glu	Val	Leu	Glu	Glu	Ile	Val	Thr	Lys
			165					170						175	
Glu	Arg	His	Arg	Glu	Ile	Asn	Lys	Val	Gly	Val	Ala	Pro	Leu	Pro	Ala
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<210> 3885

<211> 1671

<212> DNA

<213> Homo sapiens

<400> 3885
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<210> 3886
 <211> 277
 <212> PRT
 <213> Homo sapiens

<400> 3886
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 35 40 45
 Gln Val Leu Ala Ala Thr Tyr Asn Gln Ala Ala Gln Leu Trp Lys Val
 50 55 60
 Gly Glu Ala Gln Ser Lys Glu Thr Leu Ser Gly His Lys Asp Lys Val
 65 70 75 80
 Thr Ala Ala Lys Phe Lys Leu Thr Arg His Gln Ala Val Thr Gly Ser
 85 90 95
 Arg Asp Arg Thr Val Lys Glu Trp Asp Leu Gly Arg Ala Tyr Cys Ser
 100 105 110
 Arg Thr Ile Asn Val Leu Ser Tyr Cys Asn Asp Val Val Xaa Trp Gly
 115 120 125
 Pro Tyr His His Xaa Ser Gly His Asn Asp Gln Lys Ile Arg Phe Trp
 130 135 140
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 145 150 155 160
 Arg Val Thr Ser Leu Ser Leu Ser Xaa Arg Pro Thr Xaa His Leu Leu
 165 170 175
 Ser Cys Ser Arg Asp Asn Thr Leu Lys Val Ile Asp Leu Arg Val Ser
 180 185 190
 Asn Ile Arg Gln Val Phe Arg Ala Asp Gly Phe Lys Cys Gly Ser Asp
 195 200 205
 Trp Thr Lys Ala Val Phe Ser Pro Asp Arg Ser Tyr Ala Leu Ala Gly
 210 215 220
 Ser Cys Asp Gly Ala Leu Tyr Ile Trp Asp Val Asp Thr Gly Lys Leu
 225 230 235 240
 Glu Ser Arg Leu Gln Gly Pro His Cys Ala Ala Val Asn Ala Val Ala
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<210> 3887
 <211> 5612
 <212> DNA
 <213> Homo sapiens

<400> 3887

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<211> 1230

<212> PRT

<213> Homo sapiens

<400> 3888

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Glu	Leu	Gln	Lys	Asp	Ser	Ile	Lys	Leu	Asp	Asp	Asp	Ser	Glu	Arg	Lys
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 Arg Lys Val Val Asp Pro Glu Thr Gly Arg Thr Arg Leu Ile Lys Gly
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 Asp Gly Glu Val Leu Glu Glu Ile Val Thr Lys Glu Arg His Arg Glu
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<211> 179

<212> PRT

<213> Homo sapiens

<400> 3892

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Glu	Glu	Val	Val	Ala	Cys	Ala	Trp	Asp	Gly	Gln	Thr	Tyr	Ile	Ile	Asp
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His	Asn	Arg	Thr	Val	Val	Arg	Phe	Gln	Val	Asp	Glu	Asn	Ile	Arg	Ala
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 <212> DNA
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<210> 3894

<211> 334

<212> PRT

<213> Homo sapiens

<400> 3894

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Gly	Glu	Ser	Phe	Val	Met	Tyr	Tyr	Lys	Ser	Lys	Glu	Asn	Cys	Val	Val	35	40	45	
Asp	Asn	Ile	Lys	Val	Cys	Ser	Asn	Asp	Thr	Gly	Ser	Gly	Lys	Phe	Lys	50	55	60	
Cys	Val	Cys	Ile	Thr	Met	Arg	Val	Pro	Arg	Asn	Pro	Thr	Ile	Gly	Asp	65	70	75	80
Lys	Phe	Ala	Ser	Arg	His	Gly	Gln	Lys	Gly	Ile	Leu	Ser	Arg	Leu	Trp	85	90	95	
Pro	Ala	Glu	Asp	Met	Pro	Phe	Thr	Glu	Ser	Gly	Met	Val	Pro	Asp	Ile	100	105	110	
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Asp	Ala	Thr	Pro	Phe	Ile	Phe	Ser	Glu	Glu	Asn	Ser	Ala	Leu	Glu	Tyr	145	150	155	160
Phe	Gly	Glu	Met	Leu	Lys	Ala	Ala	Gly	Tyr	Asn	Phe	Tyr	Gly	Thr	Glu	165	170	175	
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Phe	Gln	Val	Arg	Thr	Thr	Gly	Ala	Arg	Asp	Arg	Val	Thr	Asn	Gln	Pro	210	215	220	
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Arg	Asp	Ala	Leu	Leu	Ala	His	Gly	Thr	Ser	Phe	Leu	Leu	His	Asp	Arg	245	250	255	
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420						
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1080						
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<210> 3896

<211> 346

<212> PRT

<213> Homo sapiens

<400> 3896

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			20					25					30		
Pro	Glu	Asp	Thr	Pro	Glu	Asn	Thr	Val	Arg	Arg	Gln	Glu	Gln	Pro	Ser
		35					40					45			
Ile	Glu	Ser	Thr	Ser	Pro	Ile	Ser	Arg	Thr	Asp	Glu	Ile	Arg	Lys	Asn
	50					55				60					
Thr	Tyr	Arg	Thr	Leu	Asp	Ser	Leu	Glu	Gln	Thr	Ile	Lys	Gln	Leu	Glu
65					70					75				80	
Asn	Thr	Ile	Ser	Glu	Met	Ser	Pro	Lys	Ala	Leu	Val	Asp	Thr	Ser	Cys
				85					90					95	
Ser	Ser	Asn	Arg	Asp	Ser	Val	Ala	Ser	Ser	Ser	His	Ile	Ala	Gln	Glu
		100						105					110		
Ala	Ser	Pro	Arg	Pro	Leu	Leu	Val	Pro	Asp	Glu	Gly	Pro	Thr	Ala	Leu
		115					120					125			
Glu	Pro	Pro	Thr	Ser	Ile	Pro	Ser	Ala	Ser	Arg	Lys	Gly	Ser	Ser	Gly
	130					135					140				
Ala	Pro	Gln	Thr	Ser	Arg	Met	Pro	Val	Pro	Met	Ser	Ala	Lys	Asn	Arg
145					150					155				160	
Pro	Gly	Thr	Leu	Asp	Lys	Pro	Gly	Lys	Gln	Ser	Lys	Leu	Gln	Asp	Pro
			165						170					175	
Arg	Gln	Tyr	Arg	Gln	Ala	Asn	Gly	Ser	Ala	Lys	Lys	Ser	Gly	Gly	Asp
		180						185					190		
Phe	Lys	Pro	Thr	Ser	Pro	Ser	Leu	Pro	Ala	Ser	Lys	Ile	Pro	Ala	Leu
	195						200					205			
Ser	Pro	Ser	Ser	Gly	Lys	Ser	Ser	Ser	Leu	Pro	Ser	Ser	Ser	Gly	Asp
	210					215				220					
Ser	Ser	Asn	Leu	Pro	Asn	Pro	Pro	Ala	Thr	Lys	Pro	Ser	Ile	Ala	Ser
225					230					235					240
Asn	Pro	Leu	Ser	Pro	Gln	Thr	Gly	Pro	Pro	Ala	His	Ser	Ala	Ser	Leu
			245						250					255	
Ile	Pro	Ser	Val	Ser	Asn	Gly	Ser	Leu	Lys	Phe	Gln	Ser	Leu	Thr	His
		260						265					270		
Thr	Gly	Lys	Gly	His	His	Leu	Ser	Phe	Ser	Pro	Gln	Ser	Gln	Asn	Gly
	275						280					285			
Arg	Ala	Pro	Pro	Pro	Leu	Ser	Phe	Ser	Ser	Ser	Pro	Pro	Ser	Pro	Ala
	290					295					300				
Ser	Ser	Val	Ser	Leu	Asn	Gln	Gly	Ala	Lys	Gly	Thr	Arg	Thr	Ile	His
305					310					315				320	
Thr	Pro	Ser	Leu	Thr	Ser	Tyr	Lys	Ala	Gln	Asn	Gly	Ser	Ser	Ser	Lys
			325						330					335	
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 <211> 366
 <212> DNA
 <213> Homo sapiens

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 240
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 366

<210> 3898
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 3898
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 20 25 30
 His Pro Arg Phe Val His Glu Trp Lys Ala Met Leu Thr Ala Ala Gln
 35 40 45
 Cys Val Gln Asp Val Ser Glu Thr Pro Val Pro Leu Pro Val Pro Leu
 50 55 60
 Ser Val Pro Leu Ser Thr Ser Val Thr Ser Ser Leu Arg Gly Ser His
 65 70 75 80
 Pro Thr Leu Cys His Cys His Ile Phe Leu Cys Ala Gln Pro Leu Pro
 85 90 95
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<210> 3899
 <211> 1092
 <212> DNA
 <213> Homo sapiens

<400> 3899
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<210> 3900

<211> 249

<212> PRT

<213> Homo sapiens

<400> 3900

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			20					25					30		
Gly	Arg	Ser	Gly	Leu	Glu	Pro	Gly	Thr	Phe	Arg	Lys	Met	Ala	Ala	Ala
			35					40				45			
Arg	Pro	Ser	Leu	Gly	Arg	Val	Leu	Pro	Gly	Ser	Ser	Val	Leu	Phe	Leu
			50				55				60				
Cys	Asp	Met	Gln	Glu	Lys	Phe	Arg	His	Asn	Ile	Ala	Tyr	Phe	Pro	Gln
65					70					75				80	
Ile	Val	Ser	Val	Ala	Ala	Arg	Met	Leu	Lys	Val	Ala	Arg	Leu	Leu	Glu
				85					90					95	
Val	Pro	Val	Met	Leu	Thr	Glu	Gln	Tyr	Pro	Gln	Gly	Leu	Gly	Pro	Thr

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Val Pro Glu Leu Gly Thr Xaa Gly Pro Ser Ala Ala Gly Gln Asp Leu
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      130              135              140
Leu Arg Ser Val Leu Leu Cys Gly Ile Glu Ala Gln Ala Cys Ile Leu
145              150              155              160
Asn Thr Thr Leu Asp Leu Leu Asp Arg Gly Leu Gln Val His Val Val
      165              170              175
Val Asp Ala Cys Ser Ser Arg Ser Gln Val Asp Arg Leu Val Ala Leu
      180              185              190
Ala Arg Met Arg Gln Ser Gly Ala Phe Leu Ser Thr Ser Glu Gly Leu
      195              200              205
Ile Leu Gln Leu Val Gly Asp Ala Val His Pro Gln Phe Lys Glu Ile
      210              215              220
Gln Lys Leu Ile Lys Glu Pro Ala Pro Asp Ser Gly Leu Leu Gly Leu
225              230              235              240
Phe Gln Gly Gln Asn Ser Leu Leu His
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<210> 3901

<211> 1287

<212> DNA

<213> Homo sapiens

<400> 3901

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840

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<210> 3902

<211> 312

<212> PRT

<213> Homo sapiens

<400> 3902

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		20						25					30		
Trp	Ala	Ala	Thr	Thr	Ala	Arg	Asn	Ala	Leu	Val	Val	Ser	Phe	Ala	Ala
	35						40					45			
Leu	Val	Ala	Tyr	Ser	Phe	Glu	Val	Thr	Gly	Tyr	Gln	Pro	Phe	Ile	Leu
	50					55					60				
Thr	Gly	Glu	Thr	Ala	Glu	Gly	Leu	Pro	Pro	Val	Arg	Ile	Pro	Pro	Phe
65					70					75					80
Ser	Val	Thr	Thr	Ala	Asn	Gly	Thr	Ile	Ser	Phe	Thr	Glu	Met	Val	Gln
				85					90					95	
Asp	Met	Gly	Ala	Gly	Leu	Ala	Val	Val	Pro	Leu	Met	Gly	Leu	Leu	Glu
		100						105					110		
Ser	Ile	Ala	Val	Ala	Lys	Ala	Phe	Ala	Ser	Gln	Asn	Asn	Tyr	Arg	Ile
		115					120					125			
Asp	Ala	Asn	Gln	Glu	Leu	Leu	Ala	Ile	Gly	Leu	Thr	Asn	Met	Leu	Gly
	130					135					140				
Ser	Leu	Val	Ser	Ser	Tyr	Pro	Val	Thr	Gly	Ser	Phe	Gly	Arg	Thr	Ala
145					150					155					160
Val	Asn	Ala	Gln	Ser	Gly	Val	Cys	Thr	Pro	Ala	Gly	Gly	Leu	Val	Thr
			165						170					175	
Gly	Val	Leu	Val	Leu	Leu	Ser	Leu	Asp	Tyr	Leu	Thr	Ser	Leu	Phe	Tyr
		180						185					190		
Tyr	Ile	Pro	Lys	Ser	Ala	Leu	Ala	Ala	Val	Ile	Ile	Met	Ala	Val	Ala
		195					200					205			
Pro	Leu	Phe	Asp	Thr	Lys	Ile	Phe	Arg	Thr	Leu	Trp	Arg	Val	Lys	Arg
	210					215					220				
Leu	Asp	Leu	Leu	Pro	Leu	Cys	Val	Thr	Phe	Leu	Leu	Cys	Phe	Trp	Glu
225					230					235					240
Val	Gln	Tyr	Gly	Ile	Leu	Ala	Gly	Ala	Leu	Val	Ser	Leu	Leu	Met	Leu

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Leu His Ser Ala Ala Arg Pro Glu Thr Lys Val Ser Glu Gly Pro Val
                260                265                270
Leu Val Leu Gln Pro Ala Ser Gly Leu Ser Phe Pro Val Leu Cys Pro
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Pro Leu Pro Ala Val Gln Asp Pro Lys Thr Leu Ser Pro Thr Leu Ser
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Ser Pro Gln Gly Cys Arg His Leu
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<210> 3903

<211> 598

<212> DNA

<213> Homo sapiens

<400> 3903

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<210> 3904

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3904

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20        25        30
Val Ile Phe Met Ala Leu Asp Leu Ala Ser Leu Ala Ser Val Arg Ala
35        40        45
Phe Ala Thr Ala Phe Leu Ser Ser Glu Pro Arg Leu Asp Ile Leu Ile
50        55        60
His Asn Ala Gly Ile Ser Ser Cys Gly Arg Thr Arg Glu Ala Phe Asn
65        70        75        80
Leu Leu Leu Arg Val Asn His Ile Gly Pro Phe Leu Leu Thr His Leu

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				85					90					95					
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			100					105					110						
Ala	Ser	Ala	Ala	His	Cys	Arg	Gly	Arg	Leu	Asp	Phe	Lys	Arg	Leu	Asp				
		115					120					125							
Arg	Pro	Val	Val	Leu	Ala	Ala	Gly	Ala	Ala	Ala	Tyr	Ala	Asp	Thr	Lys				
		130				135					140								
Leu	Ala	Asn	Val	Leu	Phe	Ala	Arg	Glu	Leu	Ala	Asn	Gln	Leu	Glu	Ala				
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<212> DNA

<213> Homo sapiens

<400> 3905

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Val	Pro	Gly	Ala	Tyr	Phe	Phe	Ser	Phe	Thr	Ala	Gly	Lys	Ala	Pro	His				
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Arg Gly Pro Pro Gly Leu Glu Asp Thr Thr Ser Lys Lys Lys Gln Lys
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Asp Arg Ala Asn Gln Glu Ser Lys Asp Gly Asp Pro Arg Lys Glu Thr
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Val Pro Pro Gly Asn Asp Pro Val Ser Pro Ala Met Val Arg Ser Arg
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305          310          315          320
Asp Ala Ala Thr Leu Val Asp Gly Lys Glu Pro Glu Ser Met Val Asn
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Glu Lys Asp Lys Ser Lys Ala Arg Ser Glu Asp Thr Gly Leu Asp Ser		480
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Val Val Arg Pro Ala Gly Pro Gly Glu Ala Gln Glu Pro Glu Glu Leu		
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Ala Ser Val Ile Ile Tyr Arg Thr Leu Ala Gly Leu Leu Pro His Asn		
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Tyr Asp Pro Asp Lys Arg Ser Leu Arg Val Pro Lys Arg Pro Ile Ile		
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Asn Thr Pro Val Val Ser Ile Ser Val His Asp Asp Glu Glu Leu Leu		1760
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Pro Arg Ala Leu Asp Lys Pro Val Thr Val Gln Phe Arg Leu Leu Glu		
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Phe Ala Val Leu Met Asp Val Ser Arg Arg Glu Asn Gly Glu Ile Leu		
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Cys Thr Val Ile Ala Ile Leu Leu His Phe Leu Tyr Leu Cys Thr Phe		1920
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Ser Trp Ala Leu Leu Glu Ala Leu His Leu Tyr Arg Ala Leu Thr Glu		
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Val Arg Asp Val Asn Thr Gly Pro Met Arg Phe Tyr Tyr Met Leu Gly		
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Trp Gly Val Pro Ala Phe Ile Thr Gly Leu Ala Val Gly Leu Asp Pro		
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Glu Gly Tyr Gly Asn Pro Asp Phe Cys Trp Leu Ser Ile Tyr Asp Thr		

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Leu Ile Trp Ser Phe	Ala Gly Pro Val	Ala Phe Ala Val	Ser Met Ser
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Val Phe Leu Tyr Ile	Leu Ala Ala Arg	Ala Ser Cys Ala	Ala Gln Arg
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Ala Val Leu Leu Leu	Leu Ser Ala Thr	Trp Leu Leu Ala	Leu Leu Ser
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Cys Ile Gln Gly Pro	Phe Ile Phe Leu	Ser Tyr Val Val	Leu Ser Lys
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Glu Val Arg Lys Ala	Leu Lys Leu Ala	Cys Ser Arg Lys	Pro Ser Pro
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Pro Gly Asp Phe Gly	Thr Thr Ala Lys	Glu Ser Ser Gly	Asn Gly Ala
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Ser Leu Gln Glu Gln	Leu Asn Gly Val	Met Pro Ile Ala	Met Ser Ile
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<212> PRT

<213> Homo sapiens

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Arg	Leu	Asn	His	Leu	Ser	Phe	Ala	Glu	Leu	Leu	Lys	Pro	Phe	Ser	Arg	35	40	45	
Leu	Thr	Ser	Glu	Val	His	Met	Arg	Asp	Pro	Asn	Asn	Gln	Leu	His	Val	50	55	60	
Ile	Lys	Asn	Leu	Lys	Ile	Ala	Val	Ser	Asn	Ile	Val	Thr	Gln	Pro	Pro	65	70	75	80
Gln	Pro	Gly	Ala	Ile	Arg	Lys	Leu	Leu	Asn	Asp	Val	Val	Ser	Gly	Ser	85	90	95	
Gln	Pro	Ala	Glu	Gly	Leu	Val	Ala	Asn	Val	Ile	Thr	Ala	Gly	Asp	Tyr	100	105	110	
Asp	Leu	Asn	Ile	Ser	Ala	Thr	Thr	Pro	Trp	Phe	Glu	Ser	Tyr	Arg	Glu	115	120	125	
Thr	Phe	Leu	Gln	Ser	Met	Pro	Ala	Ser	Asp	His	Glu	Phe	Leu	Asn	His	130	135	140	
Tyr	Leu	Ala	Cys	Met	Leu	Val	Ala	Ser	Ser	Ser	Glu	Ala	Glu	Pro	Val	145	150	155	160
Glu	Gln	Phe	Ser	Lys	Leu	Ser	Gln	Glu	Gln	His	Arg	Ile	Gln	His	Asn	165	170	175	
Ser	Asp	Tyr	Ser	Tyr	Pro	Lys	Trp	Phe	Ile	Pro	Asn	Thr	Leu	Lys	Tyr	180	185	190	
Tyr	Val	Leu	His	Asp	Val	Ser	Ala	Gly	Asp	Glu	Gln	Arg	Ala	Glu		195	200	205	
Ser	Ile	Tyr	Glu	Glu	Met	Lys	Gln	Lys	Tyr	Gly	Thr	Gln	Gly	Cys	Tyr				

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Gln Glu Ser Tyr Glu Asp Gly Pro Cys Thr Ile Thr Ser Asn Lys Asn		255
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Ser Asp Asn Asn Leu Leu Ser Leu Asp Gly Leu Asp Asn Glu Val Lys		270
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Asp Gly Leu Pro Asn Asn Phe Arg Ala His Pro Leu Gln Leu Glu Gln		285
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Ser Ser Asp Pro Ser Asn Ser Ile Asp Gly Pro Asp His Leu Arg Ser		300
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Ala Ser Ser Leu His Glu Thr Lys Lys Gly Asn Thr Gly Ile Ile His		320
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Gly Ala Cys Leu Thr Leu Thr Asp His Asp Arg Ile Arg Gln Phe Ile		335
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Gln Lys Phe Thr Phe Arg Gly Leu Leu Pro His Ile Glu Lys Thr Ile		350
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Arg Gln Leu Asn Asp Gln Leu Ile Ser Arg Lys Gly Leu Ser Arg Ser		365
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Leu Phe Ser Ala Thr Lys Lys Trp Phe Ser Gly Ser Lys Val Pro Glu		380
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Lys Ser Ile Asn Asp Leu Lys Asn Thr Ser Gly Leu Leu Tyr Pro Pro		400
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Glu Ala Pro Glu Leu Gln Ile Arg Lys Met Ala Asp Leu Cys Phe Leu		415
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Val Gln His Tyr Asp Leu Ala Tyr Ser Cys Tyr His Thr Ala Lys Lys		430
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Asp Phe Leu Asn Asp Gln Ala Met Leu Tyr Ala Ala Gly Ala Leu Glu		445
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Met Ala Ala Val Ser Ala Phe Leu Gln Pro Gly Ala Pro Arg Pro Tyr		460
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Pro Ala His Tyr Met Asp Thr Ala Ile Gln Thr Tyr Arg Asp Ile Cys		480
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Lys Asn Met Val Leu Ala Glu Arg Cys Val Leu Leu Ser Ala Glu Leu		495
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Leu Lys Ser Gln Ser Lys Tyr Ser Glu Ala Ala Ala Leu Leu Ile Arg		510
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Ala Phe His Met Ile Leu Ala Gly His Arg Phe Ser Lys Ala Gly Gln		560
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Lys Lys His Ala Leu Arg Cys Tyr Cys Gln Ala Met Gln Val Tyr Lys		575
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Gly Lys Gly Trp Ser Leu Ala Glu Asp His Ile Asn Phe Thr Ile Gly		590
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Arg Gln Ser Tyr Thr Leu Arg Gln Leu Asp Asn Ala Val Ser Ala Phe		605
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Arg His Ile Leu Ile Asn Glu Ser Lys Gln Ser Ala Ala Gln Gln Gly		620
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Ala Phe Leu Arg Glu Tyr Leu Tyr Val Tyr Lys Asn Val Ser Gln Leu		640

3076

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Arg Ser Leu Ser Ser Glu Leu Lys Lys Pro Gln Ala His Leu Pro Val		1200
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His Thr Glu Lys Gln Ser Thr Glu Asp Ala Val Arg Leu Ile Gln Lys		1215
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<210> 3915

<211> 1802

<212> DNA

<213> Homo sapiens

<400> 3915

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 <211> 342
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Leu Glu Lys Arg Gln Glu Gly Arg Ser Ser Thr Gln Thr Leu Glu Asp
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 Ser Trp Arg Tyr Glu Glu Thr Ser Glu Asn Glu Ala Val Ala Glu Glu
 65 70 75 80
 Glu Glu Glu Glu Val Glu Glu Glu Gly Glu Glu Asp Val Phe Thr Glu
 85 90 95
 Lys Ala Ser Pro Asp Met Asp Gly Tyr Pro Ala Leu Lys Val Asp Lys
 100 105 110
 Glu Thr Asn Thr Glu Thr Pro Ala Pro Ser Pro Thr Val Val Arg Pro
 115 120 125
 Lys Asp Arg Arg Val Gly Thr Pro Ser Gln Gly Pro Phe Leu Arg Gly
 130 135 140
 Ser Thr Ile Ile Arg Ser Lys Thr Phe Ser Pro Gly Pro Gln Ser Gln
 145 150 155 160
 Tyr Val Cys Arg Leu Asn Arg Ser Asp Ser Asp Ser Ser Thr Leu Ser
 165 170 175
 Lys Lys Pro Pro Phe Val Arg Asn Ser Leu Glu Arg Arg Ser Val Arg
 180 185 190
 Met Lys Arg Pro Ser Pro Pro Gln Pro Ser Ser Val Lys Ser Leu
 195 200 205
 Arg Ser Glu Arg Leu Ile Arg Thr Ser Leu Asp Leu Glu Leu Asp Leu
 210 215 220
 Gln Ala Thr Arg Thr Trp His Ser Gln Leu Thr Gln Glu Ile Ser Val
 225 230 235 240
 Leu Lys Glu Leu Lys Glu Gln Leu Glu Gln Ala Lys Ser His Gly Glu
 245 250 255
 Lys Glu Leu Pro Gln Trp Leu Arg Glu Asp Glu Arg Phe Arg Leu Leu
 260 265 270
 Leu Arg Met Leu Glu Lys Arg Gln Met Asp Arg Ala Glu His Lys Gly
 275 280 285
 Glu Leu Gln Thr Asp Lys Met Met Arg Ala Ala Ala Lys Asp Val His
 290 295 300
 Arg Leu Arg Gly Gln Ser Cys Lys Glu Pro Pro Glu Val Gln Ser Phe
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 Arg Glu Lys Met Ala Phe Phe Thr Arg Pro Arg Met Asn Ile Pro Ala

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Leu Ser Ala Asp Asp Val
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330

335

<210> 3917

<211> 597

<212> DNA

<213> Homo sapiens

<400> 3917

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180
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<210> 3918

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3918

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20           25           30
Pro Asp Asn Glu Asp Ser Gly Asp Ser Lys Asp Ile Arg Leu Thr Leu
35           40           45
Met Glu Glu Val Leu Leu Leu Gly Leu Lys Asp Lys Glu Gly Tyr Thr
50           55           60
Ser Phe Trp Asn Asp Cys Ile Ser Ser Gly Leu Arg Gly Gly Ile Leu
65           70           75           80
Ile Glu Leu Ala Met Arg Gly Arg Ile Tyr Leu Glu Pro Pro Thr Met
85           90           95
Arg Lys Lys Arg Leu Leu Asp Arg Lys Val Leu Leu Lys Ser Asp Ser
100          105          110
Pro Thr Gly Asp Val Leu Leu Asp Glu Thr Leu Lys His Ile Lys Ala
115          120          125
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135
Phe Lys Leu
150

140

<210> 3919
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<212> DNA
<213> Homo sapiens

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240
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420
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1080
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<210> 3920
 <211> 426
 <212> PRT
 <213> Homo sapiens

<400> 3920
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 20 25 30
 Leu Thr Gln Glu Arg Asp Tyr Leu Gln Ala Gln His Pro Pro Ser Pro
 35 40 45
 Ile Lys Ser Ser Ser Ala Asp Ser Thr Pro Ser Pro Thr Ser Ser Leu
 50 55 60
 Ser Ser Glu Asp Lys Gln His Leu Ala Val Glu Leu Ala Asp Thr Lys
 65 70 75 80
 Ala Arg Leu Arg Arg Val Arg Gln Glu Leu Glu Asp Lys Thr Glu Gln
 85 90 95
 Leu Val Asp Thr Arg His Glu Val Asp Gln Leu Val Leu Glu Leu Gln
 100 105 110
 Lys Val Lys Gln Glu Asn Ile Gln Leu Ala Ala Asp Ala Arg Ser Ala
 115 120 125
 Arg Ala Tyr Arg Asp Glu Leu Asp Ser Leu Arg Glu Lys Ala Asn Arg
 130 135 140
 Val Glu Arg Leu Glu Leu Glu Leu Thr Arg Cys Lys Glu Lys Leu His
 145 150 155 160
 Asp Val Asp Phe Tyr Lys Ala Arg Met Glu Glu Leu Arg Glu Asp Asn
 165 170 175
 Ile Ile Leu Ile Glu Thr Lys Ala Met Leu Glu Glu Gln Leu Thr Ala
 180 185 190
 Ala Arg Ala Arg Gly Asp Lys Val His Glu Leu Glu Lys Glu Asn Leu
 195 200 205
 Gln Leu Lys Ser Lys Leu His Asp Leu Glu Leu Asp Arg Asp Thr Asp
 210 215 220
 Lys Lys Arg Ile Glu Glu Leu Leu Glu Glu Asn Met Val Leu Glu Ile
 225 230 235 240
 Ala Gln Lys Gln Ser Met Asn Glu Ser Ala His Leu Gly Trp Glu Leu
 245 250 255
 Glu Gln Leu Ser Lys Asn Ala Asp Leu Ser Asp Ala Ser Arg Lys Ser
 260 265 270
 Phe Val Phe Glu Leu Asn Glu Cys Ala Ser Ser Arg Ile Leu Lys Leu
 275 280 285
 Glu Lys Glu Asn Gln Ser Leu Gln Ser Thr Ile Gln Gly Leu Arg Asp
 290 295 300
 Ala Ser Leu Val Leu Glu Glu Ser Gly Leu Lys Cys Gly Glu Leu Glu
 305 310 315 320
 Lys Glu Asn His Gln Leu Ser Lys Lys Ile Glu Lys Leu Gln Thr Gln
 325 330 335
 Leu Glu Arg Glu Lys Gln Ser Asn Gln Asp Leu Glu Thr Leu Ser Glu
 340 345 350
 Glu Leu Ile Arg Glu Lys Glu Gln Leu Gln Ser Asp Met Glu Thr Leu
 355 360 365
 Lys Ala Asp Lys Ala Arg Gln Ile Lys Asp Leu Glu Gln Glu Lys Asp

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      370              375              380
His Leu Asn Arg Ala Met Trp Ser Leu Arg Glu Arg Ser Gln Val Ser
385              390              395              400
Ser Glu Ala Arg Met Lys Asp Val Glu Lys Glu Asn Lys Ala Leu His
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Gln Thr Val Thr Glu Ala Asn Gly Lys Leu
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<210> 3921
 <211> 413
 <212> DNA
 <213> Homo sapiens

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<210> 3922
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 3922
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 35 40 45
 Asp Ser Val Gly Pro Ile Pro Ala Pro Arg Gly Asp Gly Cys Cys Arg
 50 55 60
 Asp Val Gln Ala Val Glu Gly Ser Arg Glu Trp Ala Trp Arg Ser Ala
 65 70 75 80
 Ser Leu Ala Pro Leu Leu Asp Ala Phe Leu Gln Pro Leu Glu Leu Arg
 85 90 95
 Gln Cys Ser Val Arg Met Ile Ile Gly Phe Pro Pro Gln Phe Leu Ala
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 His Ser Phe Val Ala Leu Val Thr Ala Phe Cys Asp Asn Ile
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<210> 3923
 <211> 820

<212> DNA

<213> Homo sapiens

<400> 3923

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720
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<210> 3924

<211> 250

<212> PRT

<213> Homo sapiens

<400> 3924

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20     25     30
Ser Glu Tyr Thr Gly Pro Thr Ser Ala Asp Leu Asp His Phe Pro Ser
35     40     45
Val Ser Gln Thr Lys Ala Glu Gln Asp Ser Asp Asn Lys Ser Ser Thr
50     55     60
Glu Ile Pro Leu Glu Thr Cys Cys Ser Ser Glu Leu Lys Gly Gly Gly
65     70     75     80
Ser Gly Thr Ser Leu Glu Arg Glu Gln Phe Glu Gly Leu Gly Ser Thr
85     90     95
Pro Asp Ala Lys Leu Asp Lys Thr Cys Ile Ser Arg Ala Met Lys Ile
100    105    110
Thr Thr Val Asn Ser Val Leu Pro Gln Asn Ser Val Leu Gly Gly Val

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<210> 3925
<211> 3296
<212> DNA
<213> Homo sapiens
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<210> 3926

<211> 683

<212> PRT

<213> Homo sapiens

<400> 3926

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			20					25					30		
Thr	Arg	Pro	Gln	Pro	Val	Leu	Pro	Leu	Leu	Asp	Leu	Asn	Asn	Gln	Ser
			35				40					45			
Val	Gly	Ile	Glu	Gly	Gly	Ala	Arg	Lys	Gly	Val	Ser	Gln	Lys	Asn	Asn
	50					55				60					
Asp	Leu	Thr	Ser	Cys	Cys	Phe	Ser	Asp	Ala	Lys	Thr	Met	Tyr	Glu	Val
65					70				75					80	
Phe	Gln	Arg	Gly	Leu	Ala	Val	Ser	Asp	Asn	Gly	Pro	Cys	Leu	Gly	Tyr
			85					90						95	
Arg	Lys	Pro	Asn	Gln	Pro	Tyr	Arg	Trp	Leu	Ser	Tyr	Lys	Gln	Val	Ser
			100					105					110		
Asp	Arg	Ala	Glu	Tyr	Leu	Gly	Ser	Cys	Leu	Leu	His	Lys	Gly	Tyr	Lys
		115				120						125			
Ser	Ser	Pro	Asp	Gln	Phe	Val	Gly	Ile	Phe	Ala	Gln	Asn	Arg	Pro	Glu
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 65 70 75 80
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 Ile Leu Gly Val Cys Pro Val Ser Pro Gly Ala Leu Ser Tyr Met Glu
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Arg Arg Cys Phe Gln Cys Gln Thr Lys Leu Glu Leu Val Gln Gln Glu
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 3660
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 3840
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 3900
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 3960
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<210> 3934

<211> 130

<212> PRT

<213> Homo sapiens

<400> 3934

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Pro	Ser	Arg	Arg	Ala	His	Ser	Leu	Thr	Thr	Ala	Gly	Ser	Pro	Asn	Leu
			20					25					30		
Ala	Ala	Gly	Thr	Ser	Ser	Pro	Ile	Arg	Pro	Val	Ser	Ser	Pro	Val	Leu
		35					40				45				
Ser	Ser	Ser	Asn	Lys	Ser	Pro	Ser	Ser	Ala	Trp	Ser	Ser	Ser	Ser	Trp
	50					55				60					
His	Gly	Arg	Ile	Lys	Gly	Gly	Met	Lys	Gly	Phe	Gln	Ser	Phe	Met	Val
65				70					75					80	
Ser	Asp	Ser	Asn	Met	Ser	Phe	Val	Glu	Phe	Val	Glu	Leu	Phe	Lys	Ser
			85					90					95		
Phe	Ser	Val	Arg	Ser	Arg	Lys	Asp	Leu	Lys	Asp	Leu	Phe	Asp	Xaa	Leu

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Cys Ser Ala Leu Gln Pro Xaa Leu Ala Pro Ser Gln Pro His Ser Thr					
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Pro Thr					
130					

<210> 3935
 <211> 1103
 <212> DNA
 <213> Homo sapiens

<400> 3935
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 120
 aggacacagc agcggccacc atggccacgc ctgggctcca gcagcatcag cagccccag
 180
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 300
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 420
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 480
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 540
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 600
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 660
 cagcctggcc gctgccgctg ccctgcagga tggcgggggtg acacttgcca gtcagatgtg
 720
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 780
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 840
 aagggagggc ccccagggt ggcccccaac ccgacaggta aacagccctg gctgtgcctg
 900
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 960
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 1103

<210> 3936
 <211> 265
 <212> PRT

<213> Homo sapiens

<400> 3936

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Val Arg Ala His Gly Asp Pro Val Ser Glu Ser Phe Val Gln Arg Val
          35           40           45
Tyr Gln Pro Phe Leu Thr Thr Cys Asp Gly His Arg Ala Cys Ser Thr
          50           55           60
Tyr Arg Thr Ile Tyr Arg Thr Ala Tyr Arg Arg Ser Pro Gly Leu Ala
65           70           75           80
Pro Ala Arg Pro Arg Tyr Ala Cys Cys Pro Gly Trp Lys Arg Thr Ser
          85           90           95
Gly Leu Pro Gly Ala Cys Gly Ala Ala Ile Cys Gln Pro Pro Cys Arg
          100          105          110
Asn Gly Gly Ser Cys Val Gln Pro Gly Arg Cys Arg Cys Pro Ala Gly
          115          120          125
Trp Arg Gly Asp Thr Cys Gln Ser Asp Val Asp Glu Cys Ser Ala Arg
          130          135          140
Arg Gly Gly Cys Pro Gln Arg Cys Val Asn Thr Ala Gly Ser Tyr Trp
145          150          155          160
Cys Gln Cys Trp Glu Gly His Ser Leu Ser Ala Asp Gly Thr Leu Cys
          165          170          175
Val Pro Lys Gly Gly Pro Pro Arg Val Ala Pro Asn Pro Thr Gly Lys
          180          185          190
Gln Pro Trp Leu Cys Leu Ala Trp Gly Gly Gly Gln Ala Val Asp Ile
          195          200          205
Ala Val Trp Leu Leu Gly Met Val Gly Gly Thr Gly Ile Trp Ala Glu
          210          215          220
Gly Gly Gly Asp Ser Leu Ser Arg Glu Gly Gly Trp Gly Gly Arg Ile
225          230          235          240
Gly Gly Phe Pro Arg Thr Gly Gly Arg Leu Pro Gly Ala Ser Tyr Gln
          245          250          255
Pro Arg Arg Gln Lys Cys Pro Val Pro
          260          265

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<210> 3937

<211> 744

<212> DNA

<213> Homo sapiens

<400> 3937

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120
ttcgccgcca accatccagt tcttctcca ggccacgttc tccttgcgga aaatgctgat
180
ctcagtcgca atgctgggccc caggggctgg cgtgggctac gcgctcctcg ttatcgtgac
240
cccgggagag cggcggaagc aggaaatgct aaaggagatg ccactgcagg acccaaggag
300

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 420
 gcgggagggt accgtgagac cggacttgcc tccgtgggcg ccggaccttg gcttgggcg
 480
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 540
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<210> 3938
 <211> 154
 <212> PRT
 <213> Homo sapiens

<400> 3938
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 20 25 30
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 35 40 45
 Arg Ala Ala Glu Ala Gly Asn Ala Lys Gly Asp Ala Thr Ala Gly Pro
 50 55 60
 Lys Glu Gln Gly Gly Gly Gly Gln Asp Pro Ala Ala Ile Ala Gly His
 65 70 75 80
 Ser Ala Gly Gly Ser Asp His Ala Gly Glu Arg Gly Leu Xaa Gly Arg
 85 90 95
 Thr Gly Trp Leu Ala Ala Lys Ala Ala Pro Ala Gly Gly His Arg Glu
 100 105 110
 Thr Gly Leu Ala Ser Val Gly Ala Gly Pro Trp Leu Gly Arg Arg Asn
 115 120 125
 Pro Arg Gln Pro Phe Ser Phe Val Gly Pro Ala Glu Ser Pro Asp Arg
 130 135 140
 Asp Thr Met Pro Gly Leu Ser Gly Val Leu
 145 150

<210> 3939
 <211> 490
 <212> DNA
 <213> Homo sapiens

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 240
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<210> 3940
 <211> 62
 <212> PRT
 <213> Homo sapiens

<400> 3940
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 Thr Asp Arg Gln Thr Gly Lys Val Arg Trp Lys His Thr Glu Asp Glu
 20 25 30
 Arg Asp Arg Gln Trp Glu Ala Glu Leu Lys Thr Val Lys Glu Arg Ala
 35 40 45
 Thr Asp Ser Glu Gly Gly Arg Asp Arg Leu Glu Pro Phe Leu
 50 55 60

<210> 3941
 <211> 2077
 <212> DNA
 <213> Homo sapiens

<400> 3941
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 240
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 300
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 420
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 480
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720
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1380
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1680
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1920
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2040
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2077

<210> 3942

<211> 89
 <212> PRT
 <213> Homo sapiens

<400> 3942
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 20 25 30
 Gln Glu Arg Leu Arg Leu Thr Arg Gly Trp Ser Pro Gln Gly Gly Cys
 35 40 45
 Gly Ala Arg Ser Gln Ser Thr Pro Ser Ser Asp Thr Leu Pro Pro Ala
 50 55 60
 Leu Leu Gly Ser Pro Ala Ser Val Ser Gly Thr Gly Gly Thr Asp Met
 65 70 75 80
 Ser Ser Ala Asn Ala His Ser Ala Leu
 85

<210> 3943
 <211> 1524
 <212> DNA
 <213> Homo sapiens

<400> 3943
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 120
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 180
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 240
 acagaggagg gagttctgga cttcagtga cccctcagca ctgaagtga gccgagaatc
 300
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 360
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 420
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 660
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 720
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 780
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 840
 aatttgctga acatctttat ctcaaattct ggaattgaaa aggcatttct atttgatgtg
 900

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 960
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 1080
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 1200
 gaagtttttg aggtgagaat gaaagtagta aaatctcgaa aggttcagaa tcggctgcag
 1260
 aagaaaaaga gagccacccc taatgggacc cctagagtgc tgctgtaggt gaggtttcag
 1320
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 1380
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 1500
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 1524

<210> 3944

<211> 435

<212> PRT

<213> Homo sapiens

<400> 3944

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Arg	Leu	Gly	Pro	Thr	Pro	Gly	Pro	Pro	Pro	Ser	Pro	Gly	Arg	Pro	Ala
			20					25					30		
Val	Gly	Thr	Met	Ser	Gln	Val	Leu	Gly	Lys	Pro	Gln	Pro	Gln	Asp	Glu
			35				40					45			
Asp	Asp	Ala	Glu	Glu	Glu	Glu	Glu	Glu	Asp	Glu	Leu	Val	Gly	Leu	Ala
			50				55				60				
Asp	Tyr	Gly	Asp	Gly	Pro	Asp	Ser	Ser	Asp	Ala	Asp	Pro	Asp	Ser	Gly
65					70					75				80	
Thr	Glu	Glu	Gly	Val	Leu	Asp	Phe	Ser	Asp	Pro	Phe	Ser	Thr	Glu	Val
				85					90					95	
Lys	Pro	Arg	Ile	Leu	Leu	Met	Gly	Leu	Arg	Arg	Ser	Gly	Lys	Ser	Ser
			100				105						110		
Ile	Gln	Lys	Val	Val	Phe	His	Lys	Met	Ser	Pro	Asn	Glu	Thr	Leu	Phe
			115				120					125			
Leu	Glu	Ser	Thr	Asn	Lys	Ile	Cys	Arg	Glu	Asp	Val	Ser	Asn	Ser	Ser
			130			135					140				
Phe	Val	Asn	Phe	Gln	Ile	Trp	Asp	Phe	Pro	Gly	Gln	Ile	Asp	Phe	Phe
145					150					155					160
Asp	Pro	Thr	Phe	Asp	Tyr	Glu	Met	Ile	Phe	Arg	Gly	Thr	Gly	Ala	Leu
				165					170					175	
Ile	Phe	Val	Ile	Asp	Ala	Gln	Asp	Asp	Tyr	Met	Glu	Ala	Leu	Thr	Arg
			180				185						190		
Leu	His	Ile	Thr	Val	Ser	Lys	Ala	Tyr	Lys	Val	Asn	Pro	Asp	Met	Asn

195	200	205
Phe Glu Val Phe Ile His Lys Val Asp Gly Leu Ser Asp Asp His Lys		
210	215	220
Ile Glu Thr Gln Arg Asp Ile His Gln Arg Ala Asn Asp Asp Leu Ala		
225	230	235
Asp Ala Gly Leu Glu Lys Ile His Leu Ser Phe Tyr Leu Thr Ser Ile		
245	250	255
Tyr Asp His Ser Ile Phe Glu Ala Phe Ser Lys Val Val Gln Lys Leu		
260	265	270
Ile Pro Gln Leu Pro Thr Leu Glu Asn Leu Leu Asn Ile Phe Ile Ser		
275	280	285
Asn Ser Gly Ile Glu Lys Ala Phe Leu Phe Asp Val Val Ser Lys Ile		
290	295	300
Tyr Ile Ala Thr Asp Ser Thr Pro Val Asp Met Gln Thr Tyr Glu Leu		
305	310	315
Cys Cys Asp Met Ile Asp Val Val Ile Asp Ile Ser Cys Ile Tyr Gly		
325	330	335
Leu Lys Glu Asp Gly Ala Gly Thr Pro Tyr Asp Lys Glu Ser Thr Ala		
340	345	350
Ile Ile Lys Leu Asn Asn Thr Thr Val Leu Tyr Leu Lys Glu Val Thr		
355	360	365
Lys Phe Leu Ala Leu Val Cys Phe Val Arg Glu Glu Ser Phe Glu Arg		
370	375	380
Lys Gly Leu Ile Asp Tyr Asn Phe His Cys Phe Arg Lys Ala Ile His		
385	390	395
Glu Val Phe Glu Val Arg Met Lys Val Val Lys Ser Arg Lys Val Gln		
405	410	415
Asn Arg Leu Gln Lys Lys Lys Arg Ala Thr Pro Asn Gly Thr Pro Arg		
420	425	430
Val Leu Leu		
435		

<210> 3945
 <211> 696
 <212> DNA
 <213> Homo sapiens

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 120
 cgggcgcgcc cagcagtagc accgcccgcg cccgcccctg gacacttgta agtttcgatt
 180
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 420
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 480

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 600
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<210> 3946

<211> 165

<212> PRT

<213> Homo sapiens

<400> 3946

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Gly	Ser	Ser	Gly	Gly	His	His	Arg	Ser	Gly	Asp	Pro	Gly	Leu	Ala	Ala
			20					25					30		
Gly	Leu	Gln	His	His	Lys	Ala	Val	Gly	Pro	Gly	His	Leu	Gln	His	Leu
			35				40					45			
Thr	Glu	Leu	Arg	Leu	Arg	Gln	Arg	Asp	Leu	Leu	Glu	Gln	Arg	Val	Gln
			50			55					60				
Gly	His	Ala	Ala	Pro	Val	Gly	Ala	Gln	Asp	Phe	Gly	Asp	Glu	Ala	Ala
65					70				75					80	
His	Leu	Arg	Val	Arg	His	Gly	Ala	Leu	Ala	Val	Leu	Ala	Leu	Pro	Arg
			85					90					95		
Arg	Gly	Thr	Arg	Phe	Arg	Gly	Asn	Arg	Lys	Ser	Lys	Leu	Thr	Ser	Val
			100				105						110		
Gln	Gly	Arg	Ala	Arg	Ala	Val	Leu	Leu	Leu	Gly	Ala	Pro	Gly	Val	Ser
			115			120						125			
Glu	Gly	Ala	Leu	Ser	Val	Ala	Val	Ser	Pro	Ala	Gln	Arg	Ser	Thr	Leu
			130			135					140				
Gly	Ser	Gln	Val	Lys	Arg	Leu	Asp	Leu	Thr	Asp	Arg	Val	Leu	Val	Ala
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Gly	Leu	Gln	Pro	Ala											
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<210> 3947

<211> 400

<212> DNA

<213> Homo sapiens

<400> 3947

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 120
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 180
 gccagcgagc aggtaatcaa agacctaaag ggctcggact acagctgggtc ctaccagacc
 240
 ccaccctcat caccagcag ctccagctcc cggaagtcca gcatgtgcag tgccccccagc
 300

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 400

<210> 3948
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 3948
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 Thr Met Leu Gly Glu Ile Thr His Leu Gln Gly Ile Ile Asp Asp Leu
 35 40 45
 Val Val Leu Thr Ala Glu Pro His Lys Leu Pro Pro Ala Ser Glu Gln
 50 55 60
 Val Ile Lys Asp Leu Lys Gly Ser Asp Tyr Ser Trp Ser Tyr Gln Thr
 65 70 75 80
 Pro Pro Ser Ser Pro Ser Ser Ser Ser Ser Arg Lys Ser Ser Met Cys
 85 90 95
 Ser Ala Pro Ser Ser Ser Ser Ser Ala Lys Gly Gly Gly Ser Pro Met
 100 105 110
 Ala Trp Gly Cys Pro Asn Ile Leu Thr Gln Phe His Leu Ser Leu Pro
 115 120 125
 Gln Pro Gly Ala Ala
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<210> 3949
 <211> 1462
 <212> DNA
 <213> Homo sapiens

<400> 3949
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 120
 ccaccatctt tctggctgca agagtcaggg gtcagaatgg ggggcagcca ccaactgctga
 180
 aaagagttgg gggaggaacc cctgaaagga gagccagaaa tgggggagct ccaaactctt
 240
 tgtgtcagct ctgtccaaat ctctaactga cttgtgaact aaaaagaaag gtttctacca
 300
 tcagcagact gtcacccata gacatttaca cagtattttg gtttggagtt cttcctaata
 360
 gtcacttcac agaaaaatat ataggtgctg ttttgccctg gaagccagac agatcagaat
 420
 attgggtaag atagctgggt cagctgtcct tggatggatc ccaaacta tgctcctttc
 480
 caggcctgag aatcgccgaa cactgtccaa cacaatgtga tcaccaaca tatcacatgc
 540

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 600
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 660
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 720
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 780
 gcaccagtg gggatattaa ttggaggatt ttctataatt agttgcattt ctttttgtaa
 840
 gtactcggct atttcatctg cattgcgaac tattctgggtg agctcttctc ttggatattg
 900
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 960
 gatccagaga actcctggac aatccttttc tctctgagtg atgctttttg ccttcccata
 1020
 ccagtcccca tcttcagtac ggaaattctg agcttcgtca atgacgatgt gttgaatgtg
 1080
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 1200
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 1320
 ctgggctgtg agcagattta aaacctcaca gccgagctgg tcactcaaga gagacctgaa
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 1462

<210> 3950

<211> 351

<212> PRT

<213> Homo sapiens

<400> 3950

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Ser	Leu	Leu	Ser	Asp	Gln	Leu	Gly	Cys	Glu	Val	Leu	Asn	Leu	Leu	Thr
		20					25					30			
Ala	Gln	Gln	Tyr	Glu	Ile	Phe	Ser	Arg	Ser	Leu	Arg	Lys	Asn	Arg	Glu
		35				40					45				
Leu	Phe	Val	His	Gly	Leu	Pro	Gly	Ser	Gly	Lys	Asn	Ile	Met	Ala	Met
	50				55					60					
Lys	Ile	Met	Glu	Lys	Ile	Arg	Asn	Val	Phe	His	Cys	Glu	Ala	His	Arg
65				70				75						80	
Ile	Leu	Tyr	Val	Cys	Glu	Asn	Gln	Pro	Leu	Arg	Asn	Phe	Ile	Ser	Asp
			85				90						95		
Arg	Asn	Ile	Cys	Arg	Ala	Glu	Thr	Arg	Glu	Thr	Phe	Leu	Arg	Glu	Lys
		100				105						110			
Phe	Glu	His	Ile	Gln	His	Ile	Val	Ile	Asp	Glu	Ala	Gln	Asn	Phe	Arg

115	120	125
Thr Glu Asp Gly Asp Trp Tyr Gly Lys Ala Lys Ser Ile Thr Gln Arg		
130	135	140
Glu Lys Asp Cys Pro Gly Val Leu Trp Ile Phe Leu Asp Tyr Phe Gln		
145	150	155
Thr Ser His Leu Gly His Ser Gly Leu Pro Pro Leu Ser Asp Gln Tyr		
165	170	175
Pro Arg Glu Glu Leu Thr Arg Ile Val Arg Asn Ala Asp Glu Ile Ala		
180	185	190
Glu Tyr Leu Gln Lys Glu Met Gln Leu Ile Ile Glu Asn Pro Pro Ile		
195	200	205
Asn Ile Pro Thr Gly Cys Leu Glu Val Phe Pro Glu Ala Glu Trp Ser		
210	215	220
Gln Gly Val Gln Gly Thr Leu Arg Ile Lys Lys Tyr Leu Thr Val Glu		
225	230	235
Gln Ile Met Thr Cys Val Ala Asp Thr Cys Arg Arg Phe Phe Asp Arg		
245	250	255
Gly Tyr Ser Pro Lys Asp Val Ala Val Leu Val Ser Thr Ala Lys Glu		
260	265	270
Val Glu His Tyr Lys Tyr Glu Leu Leu Lys Ala Met Arg Lys Lys Arg		
275	280	285
Val Val Gln Leu Ser Asp Ala Cys Asp Met Leu Gly Asp His Ile Val		
290	295	300
Leu Asp Ser Val Arg Arg Phe Ser Gly Leu Glu Arg Ser Ile Val Phe		
305	310	315
Gly Ile His Pro Arg Thr Ala Asp Pro Ala Ile Leu Pro Asn Ile Leu		
325	330	335
Ile Cys Leu Ala Ser Arg Ala Lys Gln His Leu Tyr Ile Phe Leu		
340	345	350

<210> 3951
 <211> 1012
 <212> DNA
 <213> Homo sapiens

<400> 3951
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 120
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 180
 ccatctactc tgcctccagt ccaacaagcc aacagccttc atacaagcaa aatgaagact
 240
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 300
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 360
 aaaatctggt taatgaagac ctcgctcagg agcgggaggg cgcctctgcg agagctccga
 420
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 480
 gagaacagca cgaccctgca cgtgcggggc ctgctgcagc agcaggacac cctggcgacc
 540

atcatcgaca tcttggagta ctcaaacaag aagaggctgc agcaattgaa atctgagctt
 600
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 660
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 720
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 780
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 840
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 900
 gcgcagaaag gtcctgggaa tccttgtccg acaagattca gaagaagaag aaaaaaattc
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<210> 3952

<211> 188

<212> PRT

<213> Homo sapiens

<400> 3952

Met	Lys	Thr	Leu	Thr	Arg	Val	Gln	Pro	Val	Phe	His	Phe	Lys	Pro	Thr
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			20					25					30		
Arg	Arg	Lys	Leu	Asp	Pro	Gly	Lys	Met	His	Ala	Lys	Ile	Trp	Leu	Met
		35					40					45			
Lys	Thr	Ser	Leu	Arg	Ser	Gly	Arg	Ala	Ala	Leu	Arg	Glu	Leu	Arg	Ser
	50					55					60				
Arg	Glu	Asn	Phe	Leu	Ser	Lys	Leu	Asn	Arg	Glu	Leu	Ile	Glu	Thr	Ile
65					70					75					80
Gln	Glu	Met	Glu	Asn	Ser	Thr	Thr	Leu	His	Val	Arg	Ala	Leu	Leu	Gln
				85					90					95	
Gln	Gln	Asp	Thr	Leu	Ala	Thr	Ile	Ile	Asp	Ile	Leu	Glu	Tyr	Ser	Asn
			100						105					110	
Lys	Lys	Arg	Leu	Gln	Gln	Leu	Lys	Ser	Glu	Leu	Gln	Glu	Trp	Glu	Glu
		115					120					125			
Lys	Lys	Lys	Cys	Lys	Met	Ser	Tyr	Leu	Glu	Gln	Gln	Ala	Glu	Gln	Leu
		130					135					140			
Asn	Ala	Lys	Ile	Glu	Lys	Thr	Gln	Glu	Glu	Val	Asn	Phe	Leu	Ser	Thr
145					150					155					160
Tyr	Met	Asp	His	Glu	Tyr	Ser	Ile	Lys	Ser	Val	Gln	Ile	Ser	Thr	Leu
				165					170					175	
Met	Arg	His	Cys	Ser	Arg	Leu	Arg	Thr	Ala	Ser	Arg				
			180						185						

<210> 3953

<211> 2900

<212> DNA

<213> Homo sapiens

<400> 3953

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120
gacaagctca ggtgcttggt ttaaggaaag gggctactag agtcttacca acagcgagcc
180
cagggtgggag atgaaacagg tactcccca aatagggtcat ccgagggagg aaaactgatg
240
gagagcaciaa tgtgctctga gcgtttttaa tggttttaag cttttaaatg atttcttcaa
300
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420
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480
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660
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960
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1020
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1080
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1140
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1380
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1440
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1620

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 2340
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<210> 3954

<211> 627

<212> PRT

<213> Homo sapiens

<400> 3954

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Ser	Glu	Ala	Ser	Cys	Ala	Tyr	Val	Leu	Ile	Val	Thr	Ala	Val	Tyr	Trp
		35					40				45				
Val	Ser	Glu	Ala	Val	Pro	Leu	Gly	Ala	Ala	Ala	Leu	Val	Pro	Ala	Phe
		50				55					60				
Leu	Tyr	Pro	Phe	Phe	Gly	Val	Leu	Arg	Ser	Asn	Glu	Val	Ala	Ala	Glu
65					70					75					80
Tyr	Phe	Lys	Asn	Thr	Thr	Leu	Leu	Leu	Val	Gly	Val	Ile	Cys	Val	Ala
			85						90					95	
Ala	Ala	Val	Glu	Lys	Trp	Asn	Leu	His	Lys	Arg	Ile	Ala	Leu	Arg	Met
			100					105					110		
Val	Leu	Met	Ala	Gly	Ala	Lys	Pro	Gly	Met	Leu	Leu	Leu	Cys	Phe	Met
		115					120					125			
Cys	Cys	Thr	Thr	Leu	Leu	Ser	Met	Trp	Leu	Ser	Asn	Thr	Ser	Thr	Thr
		130				135					140				
Ala	Met	Val	Met	Pro	Ile	Val	Glu	Ala	Val	Leu	Gln	Glu	Leu	Val	Ser
145					150					155					160
Ala	Glu	Asp	Glu	Gln	Leu	Val	Ala	Gly	Asn	Ser	Asn	Thr	Glu	Glu	Ala
			165					170						175	
Glu	Pro	Ile	Ser	Leu	Asp	Val	Lys	Asn	Ser	Gln	Pro	Ser	Leu	Glu	Leu
		180						185					190		
Ile	Phe	Val	Asn	Glu	Asp	Arg	Ser	Asn	Ala	Asp	Leu	Thr	Thr	Leu	Met
		195					200						205		
His	Asn	Glu	Asn	Leu	Asn	Gly	Val	Pro	Ser	Ile	Thr	Asn	Pro	Ile	Lys
		210				215					220				
Thr	Ala	Asn	Gln	His	Gln	Gly	Lys	Lys	Gln	His	Pro	Ser	Gln	Glu	Lys
225					230					235					240
Pro	Gln	Val	Leu	Thr	Pro	Ser	Pro	Arg	Lys	Gln	Lys	Leu	Asn	Arg	Lys
			245					250						255	
Tyr	Arg	Ser	His	Asp	Gln	Met	Ile	Cys	Lys	Cys	Leu	Ser	Leu	Ser	
		260					265					270			
Ile	Ser	Tyr	Ser	Ala	Thr	Ile	Gly	Leu	Thr	Thr	Ile	Ile	Gly	Thr	
		275					280				285				
Ser	Thr	Ser	Leu	Ile	Phe	Leu	Glu	His	Phe	Asn	Asn	Gln	Tyr	Pro	Ala
		290				295					300				
Ala	Glu	Val	Val	Asn	Phe	Gly	Thr	Trp	Phe	Leu	Phe	Ser	Phe	Pro	Ile
305					310					315					320
Ser	Leu	Ile	Met	Leu	Val	Val	Ser	Trp	Phe	Trp	Met	His	Trp	Leu	Phe
			325					330					335		
Leu	Gly	Cys	Asn	Phe	Lys	Glu	Thr	Cys	Ser	Leu	Ser	Lys	Lys	Lys	Lys
		340						345				350			
Thr	Lys	Arg	Glu	Gln	Leu	Ser	Glu	Lys	Arg	Ile	Gln	Glu	Glu	Tyr	Glu
		355				360						365			
Lys	Leu	Gly	Asp	Ile	Ser	Tyr	Pro	Glu	Met	Val	Thr	Gly	Phe	Phe	Phe
		370				375					380				
Ile	Leu	Met	Thr	Val	Leu	Trp	Phe	Thr	Arg	Glu	Pro	Gly	Phe	Val	Pro
385					390					395					400
Gly	Trp	Asp	Ser	Phe	Phe	Glu	Lys	Lys	Gly	Tyr	Arg	Thr	Asp	Ala	Thr
			405					410					415		
Val	Ser	Val	Phe	Leu	Gly	Phe	Leu	Leu	Phe	Leu	Ile	Pro	Ala	Lys	Lys
		420						425				430			
Pro	Cys	Phe	Gly	Lys	Lys	Asn	Asp	Gly	Glu	Asn	Gln	Glu	His	Ser	Leu
		435				440					445				
Gly	Thr	Glu	Pro	Ile	Ile	Thr	Trp	Lys	Asp	Phe	Gln	Lys	Thr	Met	Pro

450		455		460
Trp Glu Ile Val Ile Leu Val Gly Gly Gly Tyr Ala Leu Ala Ser Gly				
465		470		475
Ser Lys Ser Ser Gly Leu Ser Thr Trp Ile Gly Asn Gln Met Leu Ser				480
	485		490	495
Leu Ser Ser Leu Pro Pro Trp Ala Val Thr Leu Leu Ala Cys Ile Leu				
	500		505	510
Val Ser Ile Val Thr Glu Phe Val Ser Asn Pro Ala Thr Ile Thr Ile				
	515		520	525
Phe Leu Pro Ile Leu Cys Ser Leu Ser Glu Thr Met His Ile Asn Pro				
	530		535	540
Leu Tyr Thr Leu Ile Pro Val Thr Met Cys Ile Ser Phe Ala Val Met				
545		550		555
Leu Pro Val Gly Asn Pro Pro Asn Ala Ile Val Phe Ser Tyr Gly His				560
	565		570	575
Cys Gln Ile Lys Asp Met Val Lys Ala Gly Leu Gly Val Asn Val Ile				
	580		585	590
Gly Leu Val Ile Val Met Val Ala Ile Asn Thr Trp Gly Val Ser Leu				
	595		600	605
Phe His Leu Asp Thr Tyr Pro Ala Trp Ala Arg Val Ser Asn Ile Thr				
	610		615	620
Asp Gln Ala				
625				

<210> 3955
 <211> 522
 <212> DNA
 <213> Homo sapiens

<400> 3955
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 180
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 300
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 360
 gccatttcct tcacatggga catcaacgat gaagcaaagg ttttcatctc tgtgaactgc
 420
 ttaagcacag atttctcttc ccagaaggga gtgaaggggt tgcctcttaa cattcaagtt
 480
 gataacctata gttacaacaa ccgcagcaac aagcctgtgc ac
 522

<210> 3956
 <211> 174
 <212> PRT
 <213> Homo sapiens

<400> 3956

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 Glu Tyr Thr Leu Glu Ala Ser Lys Ser Leu Arg Gln Lys Pro Gly Asp
 20 25 30
 Ser Thr Met Thr Tyr Leu Asn Lys Gly Gln Phe Tyr Pro Ile Thr Leu
 35 40 45
 Lys Glu Val Ser Ser Ser Glu Asn Pro Ser Ser His Ser Lys Val Arg
 50 55 60
 Ser Val Ile Met Val Val Phe Ala Glu Asp Lys Ser Arg Glu Asp Gln
 65 70 75 80
 Leu Arg His Trp Lys Tyr Trp His Ser Arg Gln His Thr Ala Lys Gln
 85 90 95
 Arg Cys Ile Asp Ile Ala Asp Tyr Lys Glu Ser Phe Asn Thr Ile Ser
 100 105 110
 Asn Ile Glu Glu Ile Ala Tyr Asn Ala Ile Ser Phe Thr Trp Asp Ile
 115 120 125
 Asn Asp Glu Ala Lys Val Phe Ile Ser Val Asn Cys Leu Ser Thr Asp
 130 135 140
 Phe Ser Ser Gln Lys Gly Val Lys Gly Leu Pro Leu Asn Ile Gln Val
 145 150 155 160
 Asp Thr Tyr Ser Tyr Asn Asn Arg Ser Asn Lys Pro Val His
 165 170

<210> 3957

<211> 3891

<212> DNA

<213> Homo sapiens

<400> 3957

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 120
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 180
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<210> 3958

<211> 440

<212> PRT

<213> Homo sapiens

<400> 3958

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           20           25           30
Thr Glu Pro Ala Gln Ala Gln Lys Cys Tyr Arg Asp Leu Ala Leu Val
           35           40           45
Ser Arg Asp Gly Met Asn Ile Val Leu Asn Lys Ile Asn Gln Ile Leu
           50           55           60
Met Glu Lys Tyr Leu Lys Leu Gln Asp Thr Cys Arg Thr Gln Leu Val
           65           70           75           80
Trp Leu Val Arg Glu Leu Val Lys Ser Gly Val Leu Gly Ala Asp Gly
           85           90           95
Val Cys Met Thr Phe Met Lys Gln Ile Ala Gly Gly Asp Val Thr Ala
           100          105          110
Lys Asn Ile Trp Leu Ala Glu Ser Val Leu Asp Ile Leu Thr Glu Gln
           115          120          125
Arg Glu Trp Val Leu Lys Ser Ser Ile Leu Ile Ala Met Ala Val Tyr
           130          135          140
Thr Tyr Leu Arg Leu Ile Val Asp His His Gly Thr Ala Gln Leu Gln
           145          150          155          160
Ala Leu Arg Gln Lys Glu Val Asp Phe Cys Ile Ser Leu Leu Arg Glu
           165          170          175
Arg Phe Met Glu Cys Leu Met Ile Gly Arg Asp Leu Val Arg Leu Leu
           180          185          190
Gln Asn Val Ala Arg Ile Pro Glu Phe Glu Leu Leu Trp Lys Asp Ile
           195          200          205
Ile His Asn Pro Gln Ala Leu Ser Pro Gln Phe Thr Gly Ile Leu Gln
           210          215          220
Leu Leu Gln Ser Arg Thr Ser Arg Lys Phe Leu Ala Cys Arg Leu Thr
           225          230          235          240
Pro Asp Met Glu Thr Lys Leu Leu Phe Met Thr Ser Arg Val Arg Phe
           245          250          255
Gly Gln Gln Lys Arg Tyr Gln Asp Trp Phe Gln Arg Gln Tyr Leu Ser
           260          265          270
Thr Pro Asp Ser Gln Ser Leu Arg Cys Asp Leu Ile Arg Tyr Ile Cys
           275          280          285
Gly Val Val His Pro Ser Asn Glu Val Leu Ser Ser Asp Ile Leu Pro
           290          295          300
Arg Trp Ala Ile Ile Gly Trp Leu Leu Thr Thr Cys Thr Ser Asn Val
           305          310          315          320
Ala Ala Ser Asn Ala Lys Leu Ala Leu Phe Tyr Asp Trp Leu Phe Phe
           325          330          335
Ser Pro Asp Lys Asp Ser Ile Met Asn Ile Glu Pro Ala Ile Leu Val
           340          345          350
Met His His Ser Met Lys Pro His Pro Ala Ile Thr Ala Thr Leu Leu
           355          360          365
Asp Phe Met Cys Arg Ile Ile Pro Asn Phe Tyr Pro Pro Leu Glu Gly
           370          375          380
His Val Arg Gln Gly Val Phe Ser Ser Leu Asn His Ile Val Glu Lys

```

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385          390          395          400
Arg Val Leu Ala Cys Lys Lys Tyr Trp Leu Tyr Leu Arg Leu Leu Gly
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Ile Cys Leu Leu Xaa Leu Leu Glu Glu Phe Leu Ser Cys His Arg Ile
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Thr Lys Thr Pro Ser Ser Pro Val
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<210> 3959
 <211> 752
 <212> DNA
 <213> Homo sapiens

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120
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180
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300
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<210> 3960
 <211> 94
 <212> PRT
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<400> 3960
Pro Leu Gly Arg Pro Gly Ala His Arg Ala Phe Ile Trp Leu Tyr Lys
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Gly Pro Asn Ser Pro Leu Asp Phe Leu Phe Ser Phe Gln Asn Ala Val
20     25     30
Ser Lys Tyr Gly Ser Gln Phe Gln Gly Asn Ser Gln His Asp Ala Leu
35     40     45
Glu Phe Leu Leu Trp Leu Leu Asp Arg Val His Glu Asp Leu Glu Gly

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50	55	60
Ser Ser Arg Trp Ala Arg Cys Arg Arg Ser Phe Arg Leu Lys Pro Leu		
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Lys Pro Leu Arg Thr Ala Cys His His Gln Leu Ser Phe Leu		80
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<210> 3961
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 <212> DNA
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<211> 306

<212> PRT

<213> Homo sapiens

<400> 3962

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			20				25				30				
Thr	Val	Met	Tyr	Ile	Cys	His	Pro	Glu	Ser	Lys	His	Glu	Ile	Leu	Ser

35	40	45
Val Ala Glu Val Thr Thr Cys Glu Tyr Glu Val Val Ile Leu Thr Pro		
50	55	60
Leu Leu Cys Ser His Pro Lys Tyr Arg Phe Arg Ala Ser Pro Val Asn		
65	70	75
Asp Ile Phe Cys Gln Ser Leu Pro Gly Ser Pro Phe Lys Pro Leu Thr		
85	90	95
Leu Arg Gln Leu Glu Gln Gln Glu Glu Ile Leu Arg Val Pro Phe Arg		
100	105	110
Arg Asn Lys Glu Glu Asp Leu Gln Ser Thr Lys Glu Glu Arg Phe Pro		
115	120	125
Ala Ile His Lys Ser Ile Ala Ile Gly Ser Gln Pro Val Leu Thr Val		
130	135	140
Gly Thr Thr His Ile Ser Lys Leu Thr Asp Asp Gln Leu Ile Lys Glu		
145	150	155
Phe Leu Ser Gly Ser Tyr Cys Phe Arg Gly Gly Val Gly Trp Trp Lys		
165	170	175
Tyr Glu Phe Cys Tyr Gly Lys His Val His Gln Tyr His Glu Asp Lys		
180	185	190
Asp Ser Gly Lys Thr Ser Val Val Val Gly Thr Trp Asn Gln Glu Glu		
195	200	205
His Ile Glu Trp Ala Lys Lys Asn Thr Ala Arg Ala Tyr His Leu Gln		
210	215	220
Asp Asp Gly Thr Gln Thr Val Arg Met Val Ser His Phe Tyr Gly Asn		
225	230	235
Gly Asp Ile Cys Asp Ile Thr Asp Lys Pro Arg Gln Val Thr Val Lys		
245	250	255
Leu Lys Cys Lys Glu Ser Asp Ser Pro His Ala Val Thr Val Tyr Met		
260	265	270
Leu Glu Pro His Ser Cys Gln Tyr Ile Leu Gly Val Glu Ser Pro Val		
275	280	285
Ile Cys Lys Ile Leu Asp Thr Ala Asp Glu Asn Gly Leu Leu Ser Leu		
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Pro Asn		
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<210> 3963
 <211> 1513
 <212> DNA
 <213> Homo sapiens

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<210> 3964

<211> 436

<212> PRT

<213> Homo sapiens

<400> 3964

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			20					25					30		
Gln	Phe	Ser	Asn	Ile	Ser	Phe	Ser	Arg	Asp	Ser	Pro	Glu	Glu	Asn	Val
		35					40					45			
Gln	Ser	Asn	Lys	Met	Asp	Leu	Ser	Gly	Gly	Met	Leu	Gln	Asp	Lys	Arg

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65              70              75              80
Val Gly Lys Gly Pro Gly Ser Arg Pro Gln Ile Ser Lys Glu Ser Ser
      85              90              95
Met Glu Arg Asn Pro Tyr Phe Asp Lys Asn Gly Asn Pro Ser Met Phe
      100              105              110
Gly Val Gly Asn Thr Ala Ala Gln Pro Arg Gly Met Gln Gln Pro Pro
      115              120              125
Ala Gln Pro Leu Ser Ser Ser Gln Pro Asn Leu Arg Ala Gln Val Pro
      130              135              140
Pro Pro Leu Leu Ser Pro Gln Val Pro Val Ser Leu Leu Lys Tyr Ala
145              150              155              160
Pro Asn Asn Gly Gly Leu Asn Pro Leu Phe Gly Pro Gln Gln Val Ala
      165              170              175
Met Leu Asn Gln Leu Ser Gln Leu Asn Gln Leu Ser Gln Ile Ser Gln
      180              185              190
Leu Gln Arg Leu Leu Ala Gln Gln Gln Arg Ala Gln Ser Gln Arg Ser
      195              200              205
Val Pro Ser Gly Asn Arg Pro Gln Gln Asp Gln Gln Gly Arg Pro Leu
      210              215              220
Ser Val Gln Gln Gln Met Met Gln Gln Ser Arg Gln Leu Asp Pro Asn
225              230              235              240
Leu Leu Val Lys Gln Gln Thr Pro Pro Ser Gln Gln Gln Pro Leu His
      245              250              255
Gln Pro Ala Met Lys Ser Phe Leu Asp Asn Val Met Pro His Thr Thr
      260              265              270
Pro Glu Leu Gln Lys Gly Pro Ser Pro Ile Asn Ala Phe Ser Asn Phe
      275              280              285
Pro Ile Gly Leu Asn Ser Asn Leu Asn Val Asn Met Asp Met Asn Ser
      290              295              300
Ile Lys Glu Pro Gln Ser Arg Leu Arg Lys Trp Thr Thr Val Asp Ser
305              310              315              320
Ile Ser Val Asn Thr Ser Leu Asp Gln Asn Ser Ser Lys His Gly Ala
      325              330              335
Ile Ser Ser Gly Phe Arg Leu Glu Glu Ser Pro Phe Val Pro Tyr Asp
      340              345              350
Phe Met Asn Ser Ser Thr Ser Pro Ala Ser Pro Pro Gly Ser Ile Gly
      355              360              365
Asp Gly Trp Pro Arg Ala Lys Ser Pro Asn Gly Ser Ser Ser Val Asn
      370              375              380
Trp Pro Pro Glu Phe Arg Pro Gly Glu Pro Trp Lys Gly Tyr Pro Asn
385              390              395              400
Ile Asp Pro Glu Thr Asp Pro Tyr Val Thr Pro Gly Ser Val Ile Asn
      405              410              415
Asn Leu Pro Ile Asn Thr Val Arg Glu Val Asp His Leu Arg Asp Arg
      420              425              430
Asn Ser Gly Thr
      435

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<210> 3965

<211> 2850

<212> DNA

<213> Homo sapiens

<400> 3965
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<210> 3966

<211> 782

<212> PRT

<213> Homo sapiens

<400> 3966

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				20						25				30		
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		35					40					45				
Ala	Gln	Arg	Ala	Leu	Tyr	Arg	Asp	Val	Met	Arg	Glu	Thr	Phe	Gly	His	
	50					55					60					
Leu	Gly	Ala	Leu	Gly	Glu	Ala	Gly	Pro	Ser	Gly	Arg	Asp	Pro	Gln	Ser	
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Val	Gly	Phe	Ser	Val	Pro	Lys	Pro	Ala	Phe	Ile	Ser	Trp	Val	Glu	Gly	
				85					90					95		
Glu	Val	Glu	Ala	Trp	Ser	Pro	Glu	Ala	Gln	Asp	Pro	Asp	Gly	Glu	Ser	
			100					105					110			
Ser	Ala	Ala	Phe	Ser	Arg	Gly	Gln	Gly	Gln	Glu	Ala	Gly	Ser	Arg	Asp	
		115					120					125				
Gly	Asn	Glu	Glu	Lys	Glu	Arg	Leu	Lys	Lys	Cys	Pro	Lys	Gln	Lys	Glu	
	130					135					140					
Val	Ala	His	Glu	Val	Ala	Val	Lys	Glu	Trp	Trp	Pro	Ser	Val	Ala	Cys	
145					150					155					160	
Pro	Glu	Phe	Cys	Asn	Pro	Arg	Gln	Ser	Pro	Met	Asn	Pro	Trp	Leu	Lys	
				165					170					175		
Asp	Thr	Leu	Thr	Arg	Arg	Leu	Pro	His	Ser	Cys	Pro	Asp	Cys	Gly	Arg	
			180					185					190			
Asn	Phe	Ser	Tyr	Pro	Ser	Leu	Leu	Ala	Ser	His	Gln	Arg	Val	His	Ser	
		195					200					205				
Gly	Glu	Arg	Pro	Phe	Ser	Cys	Gly	Gln	Cys	Gln	Ala	Arg	Phe	Ser	Gln	
	210					215					220					
Arg	Arg	Tyr	Leu	Leu	Gln	His	Gln	Phe	Ile	His	Thr	Gly	Glu	Lys	Pro	
225					230					235					240	
Tyr	Pro	Cys	Pro	Asp	Cys	Gly	Arg	Arg	Phe	Arg	Gln	Arg	Gly	Ser	Leu	
				245					250					255		
Ala	Ile	His	Arg	Arg	Ala	His	Thr	Gly	Glu	Lys	Pro	Tyr	Ala	Cys	Ser	
			260					265					270			
Asp	Cys	Lys	Ser	Arg	Phe	Thr	Tyr	Pro	Tyr	Leu	Leu	Ala	Ile	His	Gln	
		275					280					285				
Arg	Lys	His	Thr	Gly	Glu	Lys	Pro	Tyr	Ser	Cys	Pro	Asp	Cys	Ser	Leu	
	290					295					300					
Arg	Phe	Ala	Tyr	Thr	Ser	Leu	Leu	Ala	Ile	His	Arg	Arg	Ile	His	Thr	
305					310					315					320	
Gly	Glu	Lys	Pro	Tyr	Pro	Cys	Pro	Asp	Cys	Gly	Arg	Arg	Phe	Thr	Tyr	
				325					330					335		
Ser	Ser	Leu	Leu	Leu	Ser	His	Arg	Arg	Ile	His	Ser	Asp	Ser	Arg	Pro	
			340					345					350			
Phe	Pro	Cys	Val	Glu	Cys	Gly	Lys	Gly	Phe	Lys	Arg	Lys	Thr	Ala	Leu	
		355					360					365				

450		455		460
Gly Pro Tyr Ile Phe Leu Glu Gly Lys Lys Pro Leu Leu Tyr Phe Pro				
465		470		475
Asp Thr Pro Pro Pro Leu Glu Lys Ala Ala Glu Ala Ala Leu Phe				
	485		490	495
Lys Gly Lys Trp Asp Asp Glu Ala Arg Glu Met Ala Pro Pro Pro Ala				
	500		505	510
Pro Leu Leu Ala Pro Arg Pro Gly Glu Thr Arg Pro Gly Cys Arg Lys				
	515		520	525
Pro Gly Thr Val Ser Phe Ala Asp Val Ala Val Tyr Phe Ser Pro Glu				
	530		535	540
Glu Trp Gly Cys Leu Arg Pro Ala Gln Arg Ala Leu Tyr Arg Asp Val				
545		550		555
Met Gln Glu Thr Tyr Gly His Leu Gly Ala Leu Gly Phe Pro Gly Pro				
	565		570	575
Lys Pro Ala Leu Ile Ser Trp Met Glu Gln Glu Ser Glu Ala Trp Ser				
	580		585	590
Pro Ala Ala Gln Asp Pro Glu Lys Gly Glu Arg Leu Gly Gly Ala Arg				
	595		600	605
Arg Gly Asp Val Pro Asn Arg Lys Glu Glu Glu Pro Glu Glu Val Pro				
	610		615	620
Arg Ala Lys Gly Pro Arg Lys Ala Pro Val Lys Glu Ser Pro Glu Val				
625		630		635
Leu Val Glu Arg Asn Pro Asp Pro Ala Ile Ser Val Ala Pro Ala Arg				
	645		650	655
Ala Gln Pro Pro Lys Asn Ala Ala Trp Asp Pro Thr Thr Gly Ala Gln				
	660		665	670
Pro Pro Ala Pro Ile Pro Ser Met Asp Ala Gln Ala Gly Gln Arg Arg				
	675		680	685
His Val Cys Thr Asp Cys Gly Arg Arg Phe Thr Tyr Pro Ser Leu Leu				
	690		695	700
Val Ser His Arg Arg Met His Ser Gly Glu Arg Pro Phe Pro Cys Pro				
705		710		715
Glu Cys Gly Met Arg Phe Lys Arg Lys Phe Ala Val Glu Ala His Gln				
	725		730	735
Trp Ile His Arg Ser Cys Ser Gly Gly Arg Arg Gly Arg Arg Pro Gly				
	740		745	750
Ile Arg Ala Val Pro Arg Ala Pro Val Arg Gly Asp Arg Asp Pro Pro				
	755		760	765
Val Leu Phe Arg His Tyr Pro Asp Ile Phe Glu Glu Cys Gly				
	770		775	780

<210> 3967

<211> 892

<212> DNA

<213> Homo sapiens

<400> 3967

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120

tactggatcc gaggccggac ctcaagtggac atcatcaaga ctggaggcta caaggtcagc

180

gccctggagg tggagtggca cctgctggcc caccacagca tcacagatgt ggctgtgatt
 240
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 300
 cactcactgt cccacagggg gctcaaagag tgggcccagaa atgtcctggc cccgtacgcg
 360
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 420
 aagaaggcgc tcatcaggca cttccacccc tcatgacccg gcagactggg actgcggggtc
 480
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 540
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 660
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 720
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<210> 3968

<211> 151

<212> PRT

<213> Homo sapiens

<400> 3968

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			20					25					30		
Thr	Val	Val	Phe	Lys	Asp	Gly	Gln	Tyr	Trp	Ile	Arg	Gly	Arg	Thr	Ser
		35				40					45				
Val	Asp	Ile	Ile	Lys	Thr	Gly	Gly	Tyr	Lys	Val	Ser	Ala	Leu	Glu	Val
	50				55					60					
Glu	Trp	His	Leu	Leu	Ala	His	Pro	Ser	Ile	Thr	Asp	Val	Ala	Val	Ile
65					70					75					80
Gly	Val	Pro	Asp	Met	Thr	Trp	Gly	Gln	Arg	Val	Thr	Ala	Val	Val	Thr
			85					90					95		
Leu	Arg	Glu	Gly	His	Ser	Leu	Ser	His	Arg	Glu	Leu	Lys	Glu	Trp	Ala
		100						105					110		
Arg	Asn	Val	Leu	Ala	Pro	Tyr	Ala	Val	Pro	Ser	Glu	Leu	Val	Leu	Val
		115					120					125			
Glu	Glu	Ile	Pro	Arg	Asn	Gln	Met	Gly	Lys	Ile	Asp	Lys	Lys	Ala	Leu
	130				135						140				
Ile	Arg	His	Phe	His	Pro	Ser									
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<210> 3969

<211> 915

<212> DNA

<213> Homo sapiens

<400> 3969

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120
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240
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360
gagagcccc ctgggggagc gccccccatc ttctgacct cgagcgggca agccctggtc
420
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480
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540
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600
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660
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720
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780
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915

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<210> 3970

<211> 89

<212> PRT

<213> Homo sapiens

<400> 3970

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Met Gly Glu Val Glu Ala Pro Gly Arg Leu Trp Leu Glu Ser Pro Pro
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Gly Gly Ala Pro Pro Ile Phe Leu Pro Ser Asp Gly Gln Ala Leu Val
20      25      30
Leu Gly Arg Gly Pro Leu Thr Gln Val Thr Asp Arg Lys Cys Ser Arg
35      40      45
Thr Gln Val Glu Leu Val Ala Asp Pro Glu Thr Arg Thr Val Ala Val
50      55      60
Lys Gln Val Ser Val Pro Leu Gln Gly Pro Ala Arg Pro Gly Asp Gly
65      70      75      80
Ile Trp Gly Gly Ile Ala Ser Arg Gln

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85

<210> 3971

<211> 433

<212> DNA

<213> Homo sapiens

<400> 3971

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120
ctgggggaacg ggtaatcaga gaaaccctca ctcataagggt ggtgcccttt atgcagagac
180
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ctaataacca gaa
433

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<210> 3972

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3972

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Met Ser Tyr His Phe Pro Cys Glu Pro Asp Pro Ile Ser Cys Leu Ser
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Ser Leu Leu Thr Thr Leu Ser Pro Ser Leu Thr Leu Phe Gln Pro His
20           25           30
Trp Pro Cys Ser Ser Ser Thr Gln Ala His Pro Gly Pro Leu His Leu
35           40           45
Pro Phe Ser Leu Ser Gly Asp Leu Pro Pro Ser Phe Lys Ser Leu His
50           55           60
Lys Gly His His Pro Met Ser Glu Gly Phe Ser Asp Tyr Pro Phe Pro
65           70           75           80
Ser Arg Ala Leu Pro Ser Met Leu His Phe Pro Arg Ala Leu Asn
85           90           95
Thr Thr Tyr Leu Ser Phe Ile Phe Ser Leu Ser Phe Phe Cys Leu Leu
100          105          110
Pro Leu Glu His His Gln Ser Arg
115          120

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<210> 3973

<211> 984

<212> DNA

<213> Homo sapiens

<400> 3973

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 120
 tgctccacct acttgacgtc cagatattac agggcccctg agatcatcct tggtttacca
 180
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 240
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 984

<210> 3974

<211> 328

<212> PRT

<213> Homo sapiens

<400> 3974

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Asp	Pro	Ser	Arg	Gln	Pro	Tyr	Arg	Val	Lys	Val	Ile	Asp	Phe	Gly	Ser
			20					25					30		
Ala	Ser	His	Val	Ser	Lys	Ala	Val	Cys	Ser	Thr	Tyr	Leu	Gln	Ser	Arg
		35				40						45			
Tyr	Tyr	Arg	Ala	Pro	Glu	Ile	Ile	Leu	Gly	Leu	Pro	Phe	Cys	Glu	Ala
	50					55					60				
Ile	Asp	Met	Trp	Ser	Leu	Gly	Cys	Val	Ile	Ala	Glu	Leu	Phe	Leu	Gly
65					70					75				80	
Trp	Pro	Leu	Tyr	Pro	Gly	Ala	Ser	Glu	Tyr	Asp	Gln	Ile	Arg	Tyr	Ile
				85					90					95	
Ser	Gln	Thr	Gln	Gly	Leu	Pro	Ala	Glu	Tyr	Leu	Leu	Ser	Ala	Gly	Thr

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120
gctcttgggg gctcaagggg gcctgggcct ctgccagcct gcaagctgcc tccaactctc
180
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240
tgcttctgag gcgtctcgga atcataggcc tcccgtggaa ggggagcagc aggcgaggtc
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360
accaccaggg taccagatc ccaggcggct cagccaggcc cagagcccca agagctgggc
420
tgttctctcc aactgggatc tggggtaggg gctgctcccc caagtccttg ggggactgtc
480
tgggacatcc aggccctgtc ttcttgtctt aaccactcac aacagagaac acgatgttct
540
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gtccacgaaa gaaggcccca cacttctccc atccggcctc cacgtaaacy cgt
593

<210> 3976
<211> 101
<212> PRT
<213> Homo sapiens

<400> 3976
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20 25 30
Leu Lys Gly Ala Trp Ala Ser Ala Ser Leu Gln Ala Ala Ser Asn Ser
35 40 45
Gln Ser Gly Phe Gly Cys Pro Gln Cys Ser Pro Glu Ala Ala Ala Pro
50 55 60
His Pro Thr Ile Leu Leu Arg Arg Leu Gly Ile Ile Gly Leu Pro
65 70 75 80
Trp Lys Gly Ser Ser Arg Arg Gly Leu Arg Glu Pro His Arg Cys Pro
85 90 95
Leu Ala Cys Gln Thr
100

<210> 3977
<211> 2668
<212> DNA
<213> Homo sapiens

<400> 3977
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gaacttccgg gactcccccg cgacccctt cccagcttcc cgtecgctcc gccgcagcga
120
ttgtctcggg ggggtgattc ggcacaaacc gcccgaccca ggggcccgtg cgcgtgtgga
180
aggggaagca ctccccctcg ggtcgcttgg aggtgcgctg gaggaggggg tgacataacc
240
agggactcga ggtccgccgt gggaatgatc cacgaactgc tcttggtctt gagcgggtac
300
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360
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attcgcttca ctgagttcat tgaacagtac acgggccatg tgcaacagca ggatcaccat
480
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<211> 667

<212> PRT

<213> Homo sapiens

<400> 3978

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<211> 2746

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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<213> Homo sapiens

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Glu Ile Ser Ser Ser Arg Thr Ser Val Ser Gln Ile Pro Phe Tyr Ser					
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Lys 1265	Trp	Ser	Ile	His	Ile	Val	Ile	Pro	Lys	Gly	Thr	Phe	Lys	Pro	Pro
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				Cys	His
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		275					280						285		
Ser	Gly	Ala	Gly	Tyr	Gln	Ser	Gly	Thr	His	Gln	Gly	Gln	Phe	Asp	His
	290					295				300					
Gly	Ser	Gly	Ser	Leu	Ser	Pro	Ser	Lys	Lys	Ser	Pro	Val	Gly	Lys	Ser
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Pro	Pro	Ser	Thr	Gly	Ser	Thr	Tyr	Gly	Ser	Ser	Gln	Lys	Glu	Glu	Ser
			325					330					335		
Ala	Ala	Ser	Gly	Gly	Ala	Ala	Tyr	Thr	Lys	Arg	Tyr	Leu	Glu	Glu	Gln
			340					345					350		
Lys	Thr	Glu	Asn	Gly	Lys	Asp	Lys	Glu	Gln	Lys	Gln	Thr	Asn	Thr	Asp

3163

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785          790          795          800
Glu Arg Glu Glu Ser Thr Thr Gly Phe Asp Lys Ser Arg Leu Gly Thr
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Lys Asp Phe Val Gly Pro Ser Glu Arg Gly Gly Gly Arg Ala Arg Gly
          820          825          830
Thr Phe Gln Phe Arg Ala Arg Gly Arg Gly Trp Gly Arg Gly Asn Tyr
          835          840          845
Ser Gly Asn Asn Asn Asn Asn Ser Asn Asn Asp Phe Gln Lys Arg Asn
          850          855          860
Arg Glu Glu Glu Trp Asp Pro Glu Tyr Thr Pro Lys Ser Lys Lys Tyr
865          870          875          880
Tyr Leu His Asp Asp Arg Glu Gly Glu Gly Ser Asp Lys Trp Val Ser
          885          890          895
Arg Gly Arg Gly Arg Gly Ala Phe Pro Arg Gly Arg Gly Arg Phe Met
          900          905          910
Phe Arg Lys Ser Ser Thr Ser Pro Lys Trp Ala His Asp Lys Phe Ser
          915          920          925
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Glu Glu Lys Asp Asn Ile Gln Pro Thr Thr Glu
945          950          955

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<210> 3991
 <211> 381
 <212> DNA
 <213> Homo sapiens

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381

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<210> 3992
 <211> 127
 <212> PRT
 <213> Homo sapiens

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<400> 3992
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Ala Gln Gln Thr Asp Val Tyr Tyr Gln Asp Pro Arg Gly Ala Ala Pro
20          25          30
Pro Phe Glu Pro Ala Pro Tyr Gln Gln Gly Met Tyr Tyr Thr Pro Pro

```

```

      35      40      45
Pro  Gln  Cys  Val  Ser  Arg  Phe  Val  Arg  Pro  Pro  Pro  Ser  Ala  Pro  Glu
      50      55      60
Pro  Ala  Pro  Pro  Tyr  Leu  Asp  His  Tyr  Pro  Pro  Tyr  Leu  Gln  Glu  Arg
65      70      75      80
Val  Val  Asn  Ser  Gln  Tyr  Gly  Thr  Gln  Pro  Gln  Gln  Tyr  Pro  Pro  Ile
      85      90      95
Tyr  Pro  Ser  His  Tyr  Asp  Gly  Arg  Arg  Val  Tyr  Pro  Ala  Pro  Ser  Tyr
      100     105     110
Thr  Arg  Glu  Glu  Ile  Phe  Arg  Glu  Ser  Pro  Ile  Pro  Ile  Glu  Ile
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 <212> DNA
 <213> Homo sapiens

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180
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394

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<210> 3994
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Glu Thr Ser Ala Ala Val Ala Ser His Arg Leu Pro Ser Gly Ala Arg
      20      25      30
Thr Glu Gly Ala Asn Ile Asn Lys Pro Asp Cys Glu Gly Glu Thr Pro
      35      40      45
Ile His Lys Ala Ala Arg Ser Gly Ser Leu Glu Cys Ile Ser Ala Leu
      50      55      60
Val Ala Asn Gly Ala His Val Glu
65      70

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<210> 3995
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 <212> DNA
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<400> 3995

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 600
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 715

<210> 3996

<211> 235

<212> PRT

<213> Homo sapiens

<400> 3996

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 20 25 30
 Ser Ser Ser Val Arg Arg Thr Gln Ala Ile Arg Arg Arg His Asn Ala
 35 40 45
 Gly Ser Asn Pro Thr Pro Pro Ala Ser Val Met Gly Ser Pro Pro Ser
 50 55 60
 Ser Leu Gln Glu Ala Gln Arg Gly Arg Ala Ala Ser His Ser Arg Ala
 65 70 75 80
 Leu Thr Leu Pro Ser Ala Leu His Phe Ala Ser Ser Leu Leu Leu Thr
 85 90 95
 Arg Ala Gly Ala Asn Val His Glu Ala Cys Thr Phe Asp Asp Thr Ser
 100 105 110
 Glu Gly Ala Val His Tyr Phe Tyr Asp Glu Ser Gly Val Arg Arg Ser
 115 120 125
 Tyr Thr Phe Gly Leu Ala Gly Gly Tyr Glu Asn Pro Val Gly Gln
 130 135 140
 Gln Gly Glu Gln Thr Ala Asn Gly Ala Trp Asp Arg His Ser His Ser
 145 150 155 160
 Ser Ser Phe His Ser Ala Asp Val Pro Glu Ala Thr Gly Gly Leu Asn
 165 170 175
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BNSDOCID: <WO 0058473A2_1_>

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<210> 3998
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<400> 3998

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      20           25           30
Glu Ala Glu Ala Phe Ala Leu Tyr His Lys Ala Leu Asp Leu Gln Lys
      35           40           45
His Asp Arg Phe Glu Glu Ser Ala Lys Ala Tyr His Glu Leu Leu Glu
      50           55           60
Ala Ser Leu Leu Arg Glu Ala Val Ser Ser Gly Asp Glu Lys Glu Gly
      65           70           75           80
Leu Lys His Pro Gly Leu Ile Leu Lys Tyr Ser Thr Tyr Lys Asn Leu
      85           90           95
Ala Gln Leu Ala Ala Gln Arg Glu Asp Leu Glu Thr Ala Met Glu Phe
      100          105          110
Tyr Leu Glu Ala Val Met Leu Asp Ser Thr Asp Val Asn Leu Trp Tyr
      115          120          125
Lys Ile Gly His Val Ala Leu Arg Leu Ile Arg Ile Pro Leu Ala Arg
      130          135          140
His Ala Phe Glu Glu Gly Leu Arg Cys Asn Pro Asp His Trp Pro Cys
      145          150          155          160
Leu Asp Asn Leu Ile Thr Val Leu Tyr Thr Leu Ser Asp Tyr Thr Thr
      165          170          175
Cys Leu Tyr Phe Ile Cys Lys Ala Leu Glu Lys Asp Cys Arg Tyr Ser
      180          185          190
Lys Gly Leu Val Leu Lys Glu Lys Ile Phe Glu Glu Gln Pro Cys Leu
      195          200          205
Arg Lys Asp Ser Leu Arg Met Phe Leu Lys Cys Asp Met Ser Ile His
      210          215          220
Asp Val Ser Val Ser Ala Ala Glu Thr Gln Ala Ile Val Asp Glu Ala
      225          230          235          240
Leu Gly Leu Arg Lys Lys Arg Gln Ala Leu Ile Val Arg Glu Lys Glu
      245          250          255
Pro Asp Leu Lys Leu Val Gln Pro Ile Pro Phe Phe Thr Trp Lys Cys
      260          265          270
Leu Gly Glu Ser Leu Leu Ala Met Tyr Asn His Leu Thr Thr Cys Glu
      275          280          285
Pro Pro Arg Pro Ser Leu Gly Lys Arg Ile Asp Leu Ser Asp Tyr Gln
      290          295          300
Asp Pro Ser Gln Pro Leu Glu Ser Ser Met Val Val Thr Pro Val Asn
      305          310          315          320
Val Ile Gln Pro Ser Thr Val Ser Thr Asn Pro Ala Val Ala Val Ala
      325          330          335
Glu Pro Val Val Ser Tyr Thr Ser Val Ala Thr Thr Ser Phe Pro Leu
      340          345          350
His Ser Pro Gly Leu Leu Glu Thr Gly Ala Pro Val Gly Asp Ile Ser
      355          360          365
Gly Gly Asp Lys Ser Lys Lys Gly Val Lys Arg Lys Lys Ile Ser Glu
      370          375          380
Glu Ser Gly Glu Thr Ala Lys Arg Arg Ser Ala Arg Val Arg Asn Thr
      385          390          395          400
Lys Cys Lys Lys Glu Glu Lys Val Asp Phe Gln Glu Leu Leu Met Lys
      405          410          415
Phe Leu Pro Ser Arg Leu Arg Lys Leu Asp Pro Glu Glu Glu Asp Asp

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465															480
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His	Lys	Phe	Leu	Val	Arg	Trp	Pro	Pro	Gly	Leu	Ala	Glu	Val	Val	Leu
Ser	Val	Tyr	His	Ser	Trp	Arg	Arg	His	Ser	Thr	Ser	Leu	Pro	Asn	Pro
Leu	Leu	Arg	Asp	Cys	Ser	Asn	Lys	His	Ile	Lys	Asp	Met	Met	Leu	Met
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625															640
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Ser	Val	Val	Ser	Leu	Glu	Glu	Ile	Asp	Lys	Asn	Leu	Lys	Ser	Leu	Glu
Arg	Cys	Gln	Ser	Leu	Glu	Glu	Ile	Gln	Arg	Leu	Tyr	Glu	Ala	Gly	Asp
Tyr	Lys	Ala	Val	Val	His	Le									

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Leu Cys His Gln Gln Gln Leu Gln Asn Pro Ala Glu Glu Gly Met Ser				
865		870		875
Glu Thr Pro Met Leu Pro Ser Ser Leu Met Leu Leu Asn Thr Ala His				880
	885		890	895
Glu Tyr Leu Gly Arg Arg Ser Trp Cys Cys Asn Ser Asp Gly Ala Leu				
	900		905	910
Leu Arg Phe Tyr Val Arg Val Leu Gln Lys Glu Leu Ala Ala Ser Thr				
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Ser Glu Asp Thr His Pro Tyr Lys Glu Glu Leu Glu Thr Ala Leu Glu				
	930		935	940
Gln Cys Phe Tyr Cys Leu Tyr Ser Phe Pro Ser Lys Lys Ser Lys Ala				
945		950		955
Arg Tyr Leu Glu Glu His Ser Ala Gln Gln Val Asp Leu Ile Trp Glu				
	965		970	975
Asp Ala Leu Phe Met Phe Glu Tyr Phe Lys Pro Lys Thr Leu Pro Glu				
	980		985	990
Phe Asp Ser Tyr Lys Thr Ser Thr Val Ser Ala Asp Leu Ala Asn Leu				
	995		1000	1005
Leu Lys Arg Ile Ala Thr Ile Val Pro Arg Thr Glu Arg Pro Ala Leu				
	1010		1015	1020
Ser Leu Asp Lys Val Ser Ala Tyr Ile Glu Gly Thr Ser Thr Glu Val				
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Pro Cys Leu Pro Glu Gly Ala Asp Pro Ser Pro Pro Val Val Asn Glu				
	1045		1050	1055
Leu Tyr Tyr Leu Leu Ala Asp Tyr His Phe Lys Asn Lys Glu Gln Ser				
	1060		1065	1070
Lys Ala Ile Lys Phe Tyr Met His Asp Ile Cys Ile Cys Pro Asn Arg				
	1075		1080	1085
Phe Asp Ser Trp Ala Gly Met Ala Leu Ala Arg Ala Ser Arg Ile Gln				
	1090		1095	1100
Asp Lys Leu Asn Ser Asn Glu Leu Lys Ser Asp Gly Pro Ile Trp Lys				
1105		1110		1115
His Ala Thr Pro Val Leu Asn Cys Phe Arg Arg Ala Leu Glu Ile Asp				
	1125		1130	1135
Ser Ser Asn Leu Ser Leu Trp Ile Glu Tyr Gly Thr Met Ser Tyr Ala				
	1140		1145	1150
Leu His Ser Phe Ala Ser Arg Gln Leu Lys Gln Trp Arg Gly Glu Leu				
	1155		1160	1165
Pro Pro Glu Leu Val Gln Gln Met Glu Gly Arg Arg Asp Ser Met Leu				
	1170		1175	1180
Glu Thr Ala Lys His Cys Phe Thr Ser Ala Ala Arg Cys Glu Gly Asp				
1185		1190		1195
Gly Asp Glu Glu Glu Trp Leu Ile His Tyr Met Leu Gly Lys Val Ala				
	1205		1210	1215
Glu Lys Gln Gln Gln Pro Pro Thr Val Tyr Leu Leu His Tyr Arg Gln				
	1220		1225	1230
Ala Gly His Tyr Leu His Glu Glu Ala Ala Arg Tyr Pro Lys Lys Ile				
	1235		1240	1245
His Tyr His Asn Pro Pro Glu Leu Ala Met Glu Ala Leu Glu Val Tyr				
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Phe Arg Leu His Ala Ser Ile Leu Lys Leu Leu Gly Lys Pro Asp Ser				
1265		1270		1275
Gly Val Gly Ala Glu Val Leu Val Asn Phe Met Lys Glu Ala Ala Glu				

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Gly	Pro	Phe	Ala	Arg	Gly
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Lys	Glu	Lys	Ala	Cys	Leu
	1315		1320		1325
Thr	Leu	Pro	Gly	Pro	Gly
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Leu	Thr	Ser	Pro	Pro	Tyr
	1345		1350		1355
Lys	Cys	Lys	Lys	Pro	His
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Asp	Ser	Thr	Ala	Val	Ala
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Phe	Asn	Glu	Pro	Thr	Ser
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Glu	Lys	Arg	Leu	Pro	Ile
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Asp	Leu	Gln	Gly	Ala	Thr
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Glu	Ser	Thr	Glu	Gly	Phe
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Ala	Ala	Glu	Thr	Pro	Ala
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Ser	Thr	Pro	Thr	Leu	Trp
	1475		1480		1485
Glu	Pro	Val	Ala	Phe	Pro
	1490		1495		1500
Arg	Gln	Phe	Leu	Thr	Glu
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Ser	Arg	Phe	Pro	Gln	His
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Tyr	Thr	Tyr	Ser	Lys	Thr
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Leu	Leu	Gly	Ser	Ser	Ile
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Gln	Gly	Leu	Phe	Cys	Glu
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Trp	Arg	Ile	Pro	Val	Asp
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His	Met	Asn	Arg	Ser	Ile
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Pro	Asp	Gln	Gly	Lys	Lys
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Ala	Gln	Arg	Ala	Phe	Ile
	1650		1655		1660
Ser	Glu	Leu	Ala	Glu	Gly
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Leu	Pro	Gly	Ala	Arg	Met
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Glu	Asp	Gly	Gln	Glu	Gly
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Gly Glu Arg Lys Asp Lys Glu Ser Pro Arg Ala Gly Pro Thr Glu Pro		
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Met Asp Thr Ser Glu Ala Thr Val Cys His Ser Asp Leu Glu Arg Thr		
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Pro Pro Leu Leu Pro Gly Arg Pro Ala Arg Asp Arg Gly Pro Glu Ser		
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Arg Pro Thr Glu Leu Ser Leu Glu Glu Leu Ser Ile Ser Ala Arg Gln		
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Gln Pro Thr Pro Leu Thr Pro Ala Gln Pro Ala Pro Ala Pro Ala Pro		
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Ala Thr Thr Thr Gly Thr Arg Ala Gly Gly His Pro Glu Glu Pro Leu		
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Ser Arg Leu Ser Arg Lys Arg Lys Leu Leu Glu Asp Thr Glu Ser Gly		
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Lys Thr Leu Leu Asp Ala Tyr Arg Val Trp Gln Gln Gly Gln Lys		
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Gly Val Ala Tyr Asp Leu Gly Arg Val Glu Arg Ile Met Ser Glu Thr		
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Tyr Met Leu Ile Lys Gln Val Asp Glu Glu Ala Ala Leu Glu Gln Ala		
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Ser Gly Asp Thr Pro Thr Thr Pro Lys His Pro Lys Asp Ser Arg Glu		
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Asn Phe Phe Pro Val Thr Val Val Pro Thr Ala Pro Asp Pro Val Pro		
1940	1945	1950
Ala Asp Ser Val Gln Arg Pro Ser Asp Ala His Thr Lys Pro Arg Pro		
1955	1960	1965
Ala Leu Ala Ala Ala Thr Thr Ile Ile Thr Cys Pro Pro Ser Ala Ser		
1970	1975	1980
Ala Ser Thr Leu Asp Gln Ser Lys Asp Pro Gly Pro Pro Arg Pro His		
1985	1990	1995
Arg Pro Glu Ala Thr Pro Ser Met Ala Ser Leu Gly Pro Glu Gly Glu		
2005	2010	2015
Glu Leu Ala Arg Val Ala Glu Gly Thr Ser Phe Pro Pro Gln Glu Pro		
2020	2025	2030
Arg His Ser Pro Gln Val Lys Met Ala Pro Thr Ser Ser Pro Ala Glu		
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Pro His Cys Trp Pro Ala Glu Ala Ala Leu Gly Thr Gly Ala Glu Pro		
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Thr Cys Ser Gln Glu Gly Lys Leu Arg Pro Glu Pro Arg Arg Asp Gly		
2065	2070	2075
Glu Ala Gln Glu Ala Ala Ser Glu Thr Gln Pro Leu Ser Ser Pro Pro		
2085	2090	2095
Thr Ala Ala Ser Ser Lys Ala Pro Ser Ser Gly Ser Ala Gln Pro Pro		
2100	2105	2110
Glu Gly His Pro Gly Lys Pro Glu Pro Ser Arg Ala Lys Ser Arg Pro		
2115	2120	2125
Leu Pro Asn Met Pro Lys Leu Val Ile Pro Ser Ala Ala Thr Lys Phe		
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Pro Pro Glu Ile Thr Val Thr Pro Pro Thr Pro Thr Leu Leu Ser Pro		

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Lys Gly Ser Ile Ser Glu Glu Thr Lys Gln Lys Leu Lys Ser Ala Ile						
	2165		2170		2175	
Leu Ser Ala Gln Ser Ala Ala Asn Val Arg Lys Glu Ser Leu Cys Gln						
	2180		2185		2190	
Pro Ala Leu Glu Val Leu Glu Thr Ser Ser Gln Glu Ser Ser Leu Glu						
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<210> 3999
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 <212> DNA
 <213> Homo sapiens

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<210> 4000

<211> 606

<212> PRT

<213> Homo sapiens

<400> 4000

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Glu Glu Leu Cys Thr Pro Pro Asp Pro Gly Ala Ala Phe Val Val Val
          35           40           45
Glu Cys Pro Asp Glu Ser Phe Ile Gln Pro Ile Cys Glu Asn Ala Thr
          50           55           60
Phe Gln Arg Tyr Gln Gly Lys Ala Asp Ala Pro Val Ala Leu Val Val
65           70           75           80
His Met Ala Pro Ala Ser Val Leu Val Asp Ser Arg Tyr Gln Gln Trp
          85           90           95
Met Glu Arg Phe Gly Pro Asp Thr Gln His Leu Val Leu Asn Glu Asn
          100          105          110
Cys Ala Ser Val His Asn Leu Arg Ser His Lys Ile Gln Thr Gln Leu
          115          120          125
Asn Leu Ile His Pro Asp Ile Phe Pro Leu Leu Thr Ser Phe Arg Cys
          130          135          140
Lys Lys Glu Gly Pro Thr Leu Ser Val Pro Met Val Gln Gly Glu Cys
145          150          155          160
Leu Leu Lys Tyr Gln Leu Arg Pro Arg Arg Glu Trp Gln Arg Asp Ala
          165          170          175
Ile Ile Thr Cys Asn Pro Glu Glu Phe Ile Val Glu Ala Leu Gln Leu
          180          185          190
Pro Asn Phe Gln Gln Ser Val Gln Glu Tyr Arg Arg Ser Ala Gln Asp
          195          200          205
Gly Pro Ala Pro Ala Glu Lys Arg Ser Gln Tyr Pro Glu Ile Ile Phe
210          215          220
Leu Gly Thr Gly Ser Ala Ile Pro Met Lys Ile Arg Asn Val Ser Ala
225          230          235          240
Thr Leu Val Asn Ile Ser Pro Asp Thr Ser Leu Leu Leu Asp Cys Gly
          245          250          255
Glu Gly Thr Phe Gly Gln Leu Cys Arg His Tyr Gly Asp Gln Val Asp
          260          265          270
Arg Val Leu Gly Thr Leu Ala Ala Val Phe Val Ser His Leu His Ala
          275          280          285
Asp His His Thr Gly Leu Pro Ser Ile Leu Leu Gln Arg Glu Arg Ala
290          295          300
Leu Ala Ser Leu Gly Lys Pro Leu His Pro Leu Leu Val Val Ala Pro
305          310          315          320
Asn Gln Leu Lys Ala Trp Leu Gln Gln Tyr His Asn Gln Cys Gln Glu
          325          330          335
Val Leu His His Ile Ser Met Ile Pro Ala Lys Cys Leu Gln Glu Gly
          340          345          350
Ala Glu Ile Ser Ser Pro Ala Val Glu Arg Leu Ile Ser Ser Leu Leu
          355          360          365
Arg Thr Cys Asp Leu Glu Glu Phe Gln Thr Cys Leu Val Arg His Cys
370          375          380
Lys His Ala Phe Gly Cys Ala Leu Val His Thr Ser Gly Trp Lys Val
385          390          395          400
Val Tyr Ser Gly Asp Thr Met Pro Cys Glu Ala Leu Val Arg Met Gly
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Lys Asp Ala Thr Leu Leu Ile His Glu Ala Thr Leu Glu Asp Gly Leu

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<210> 4001
<211> 1251
<212> DNA
<213> Homo sapiens
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240
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420
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480
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540
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600
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660
accaccacca ctgacctagg tgtgaccacc agcgtgccgg aggtgcccat gatggagaag
720

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 780
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 1080
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<210> 4002

<211> 417

<212> PRT

<213> Homo sapiens

<400> 4002

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Leu	Ser	Asp	Ser	Leu	Gly	Val	Ser	Val	Met	Ala	Thr	Asp	Gln	Asp	Ser
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Tyr	Ser	Thr	Ser	Ser	Thr	Glu	Glu	Leu	Glu	Gln	Phe	Ser	Ser	Pro	
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Ser	Val	Lys	Lys	Lys	Pro	Ser	Met	Ile	Leu	Gly	Lys	Ala	Arg	His	Arg
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Leu	Ser	Phe	Ala	Ser	Phe	Ser	Ser	Met	Phe	His	Ala	Phe	Leu	Ser	Asn
				85					90					95	
Asn	Arg	Lys	Leu	Tyr	Lys	Lys	Val	Val	Glu	Leu	Ala	Gln	Asp	Lys	Gly
			100					105					110		
Ser	Tyr	Phe	Gly	Ser	Leu	Val	Gln	Asp	Tyr	Lys	Val	Tyr	Ser	Leu	Glu
		115					120					125			
Met	Met	Ala	Arg	Gln	Thr	Ser	Ser	Thr	Glu	Met	Leu	Gln	Glu	Ile	Arg
	130					135					140				
Thr	Met	Met	Thr	Gln	Leu	Lys	Ser	Tyr	Leu	Leu	Gln	Ser	Thr	Glu	Leu
145					150					155				160	
Lys	Ala	Leu	Val	Asp	Pro	Ala	Leu	His	Ser	Glu	Glu	Glu	Leu	Glu	Ala
			165					170						175	
Ile	Val	Glu	Ser	Ala	Leu	Tyr	Lys	Cys	Val	Leu	Lys	Pro	Leu	Lys	Glu
		180					185						190		
Ala	Ile	Asn	Ser	Cys	Leu	His	Gln	Ile	His	Ser	Lys	Asp	Gly	Ser	Leu
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Gln	Gln	Leu	Lys	Glu	Asn	Gln	Leu	Val	Ile	Leu	Ala	Thr	Thr	Thr	Thr
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Asp	Leu	Gly	Val	Thr	Thr	Ser	Val	Pro	Glu	Val	Pro	Met	Met	Glu	Lys

225									230									240
Ile	Leu	Gln	Lys	Phe	Thr	Ser	Met	His	Lys	Ala	Tyr	Ser	Pro	Glu	Lys			
				245					250					255				
Lys	Ile	Ser	Ile	Leu	Leu	Lys	Thr	Cys	Lys	Leu	Ile	Tyr	Asp	Ser	Met			
				260					265					270				
Ala	Leu	Gly	Asn	Pro	Gly	Lys	Pro	Tyr	Gly	Ala	Asp	Asp	Phe	Leu	Pro			
				275					280					285				
Val	Leu	Met	Tyr	Val	Leu	Ala	Arg	Ser	Asn	Leu	Thr	Glu	Met	Leu	Leu			
				290					295					300				
Asn	Val	Glu	Tyr	Met	Met	Glu	Leu	Met	Asp	Pro	Ala	Leu	Gln	Leu	Gly			
305					310					315					320			
Glu	Gly	Ser	Tyr	Tyr	Leu	Thr	Thr	Thr	Tyr	Gly	Ala	Leu	Glu	His	Ile			
				325					330					335				
Lys	Ser	Tyr	Asp	Lys	Ile	Thr	Val	Thr	Arg	Gln	Leu	Ser	Val	Glu	Val			
				340					345					350				
Gln	Asp	Ser	Ile	His	Arg	Trp	Glu	Arg	Arg	Arg	Thr	Leu	Asn	Lys	Ala			
				355					360					365				
Arg	Ala	Ser	Arg	Ser	Ser	Val	Gln	Asp	Phe	Ile	Cys	Val	Ser	Tyr	Leu			
				370					375					380				
Glu	Pro	Glu	Gln	Gln	Ala	Arg	Thr	Leu	Ala	Ser	Arg	Ala	Asp	Thr	Gln			
385					390					395					400			
Ala	Gln	Ala	Leu	Cys	Ala	Gln	Cys	Ala	Glu	Lys	Phe	Ala	Val	Glu	Arg			
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<210> 4003
<211> 581
<212> DNA
<213> Homo sapiens
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480
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581

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<210> 4004

<211> 160
 <212> PRT
 <213> Homo sapiens

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 Ala Lys Pro Pro Val Ser Phe Phe Ser Leu Arg Ser Pro Val Leu Asp
 50 55 60
 Leu Phe Gln Gly Gln Leu Asp Tyr Ala Glu Tyr Val Arg Arg Asp Ser
 65 70 75 80
 Glu Val Val Leu Leu Phe Phe Tyr Ala Pro Trp Cys Gly Gln Ser Ile
 85 90 95
 Ala Ala Arg Ala Glu Ile Glu Gln Ala Ala Ser Arg Leu Ser Asp Gln
 100 105 110
 Val Leu Phe Val Ala Ile Asn Cys Trp Trp Asn Gln Gly Lys Cys Arg
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 Ser Phe Gly Pro Ile Glu Tyr Lys Gly Pro His Glu Cys Cys Leu His
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<210> 4005
 <211> 666
 <212> DNA
 <213> Homo sapiens

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<210> 4006

<211> 222

<212> PRT

<213> Homo sapiens

<400> 4006

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Pro Lys Met Thr Arg Ser Lys Leu Lys Glu Val Val Glu Lys Gly Met
      50           55           60
Val Ile Pro Thr Trp Asn Ile Ser Pro Ile Lys Lys Ala Asn Glu Ile
      65           70           75           80
Lys Pro Pro Gln Phe Val Asp Ile His Leu Glu Glu Asp Asp Ser Ser
      85           90           95
Asp Glu Glu Tyr Gln Pro Asp Asp Glu Glu Glu Asp Glu Thr Ala Glu
      100          105          110
Glu Ser Leu Leu Glu Ser Asp Val Glu Ser Thr Ala Ser Ser Pro Arg
      115          120          125
Gly Ala Lys Lys Ser Arg Leu Arg Gln Ser Ser Glu Met Thr Glu Thr
      130          135          140
Asp Glu Glu Ser Gly Ile Leu Ser Glu Ala Glu Lys Val Thr Thr Pro
      145          150          155          160
Ala Ile Arg His Ile Ser Ala Glu Val Val Pro Met Gly Pro Pro Pro
      165          170          175
Pro Pro Lys Pro Lys Gln Thr Arg Asp Ser Thr Phe Met Glu Lys Leu
      180          185          190
His Ala Val Asp Glu Glu Leu Ala Ser Ser Pro Val Cys Met Asp Ser
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Phe Gln Pro Met Asp Asp Ser Leu Ile Ala Phe Arg Thr Arg
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<210> 4007

<211> 2313

<212> DNA

<213> Homo sapiens

<400> 4007

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<210> 4008

<211> 290

<212> PRT

<213> Homo sapiens

<400> 4008

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			20					25					30		
Ser	Glu	Ala	Ser	Lys	Glu	Asn	Arg	Asp	Ile	Glu	Ile	Ser	Thr	Glu	Glu
		35				40						45			
Glu	Lys	Asp	Thr	Gly	Asp	Leu	Lys	Asp	Ser	Ser	Leu	Leu	Lys	Thr	Lys
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Arg	Lys	His	Lys	Lys	Lys	His	Lys	Glu	Arg	His	Lys	Met	Gly	Glu	Glu
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Val	Ile	Pro	Leu	Arg	Val	Leu	Ser	Lys	Ser	Glu	Trp	Met	Asp	Leu	Lys
			85					90					95		
Lys	Glu	Tyr	Leu	Ala	Leu	Gln	Lys	Ala	Ser	Met	Ala	Ser	Leu	Lys	Lys
		100						105					110		
Thr	Ile	Ser	Gln	Ile	Lys	Ser	Glu	Ser	Glu	Met	Glu	Thr	Asp	Ser	Gly
		115					120					125			
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Glu	Cys	Arg	Thr	Gln	Glu	Lys	Val	Asn	Ala	Thr	Gly	Pro	Gln	Phe	Val
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			165					170					175		
Lys	Gln	Val	Arg	Asp	Thr	Leu	Ala	Ala	Ile	Ser	Glu	Val	Leu	Tyr	Val
		180					185					190			
Asp	Leu	Leu	Glu	Gly	Asp	Thr	Glu	Cys	His	Ala	Arg	Phe	Lys	Thr	Pro
	195					200					205				
Glu	Asp	Ala	Gln	Ala	Val	Ile	Asn	Ala	Tyr	Thr	Glu	Ile	Asn	Lys	Lys
	210				215						220				
His	Cys	Trp	Lys	Leu	Glu	Ile	Leu	Ser	Gly	Asp	His	Glu	Gln	Arg	Tyr
225					230					235				240	
Trp	Gln	Lys	Ile	Leu	Val	Asp	Arg	Gln	Ala	Lys	Leu	Asn	Gln	Pro	Arg
			245					250					255		
Glu	Lys	Lys	Arg	Gly	Thr	Glu	Lys	Leu	Ile	Thr	Lys	Ala	Glu	Lys	Ile

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 275 280 285
 Tyr Asp
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<210> 4009
 <211> 675
 <212> DNA
 <213> Homo sapiens

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 180
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<210> 4010
 <211> 225
 <212> PRT
 <213> Homo sapiens

<400> 4010
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 Met Gln Ala Ser Val Pro Gly Pro Ser Glu Glu Pro Val Val Tyr Asn
 35 40 45
 Pro Thr Thr Ala Ala Phe Ile Cys Asp Ser Leu Val Asn Glu Lys Thr
 50 55 60
 Ile Gly Ser Pro Pro Asn Glu Phe Tyr Cys Ser Glu Asn Thr Ser Val
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<210> 4011
<211> 1371
<212> DNA
<213> Homo sapiens
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180					
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480					
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<210> 4012

<211> 419

<212> PRT

<213> Homo sapiens

<400> 4012

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		20						25					30		
Ser	Arg	Ser	Arg	Ala	Arg	Ala	Gly	Glu	Leu	Trp	Leu	Pro	His	Gly	Thr
	35						40					45			
Val	Ala	Thr	Pro	Val	Phe	Met	Pro	Val	Gly	Thr	Gln	Ala	Thr	Met	Lys
	50				55						60				
Gly	Ile	Thr	Thr	Glu	Gln	Leu	Asp	Ala	Leu	Gly	Cys	Arg	Ile	Cys	Leu
65				70					75					80	
Gly	Asn	Thr	Tyr	His	Leu	Gly	Leu	Arg	Pro	Gly	Pro	Glu	Leu	Ile	Gln
				85				90						95	
Lys	Ala	Asn	Gly	Leu	His	Gly	Phe	Met	Asn	Trp	Pro	His	Asn	Leu	Leu
		100						105					110		
Thr	Leu	Cys	Gly	Gly	Val	Ser	Leu	Asp	Ser	Gly	Gly	Phe	Gln	Met	Val
	115						120					125			
Ser	Leu	Val	Ser	Leu	Ser	Glu	Val	Thr	Glu	Glu	Gly	Val	Arg	Phe	Arg
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Ser	Pro	Tyr	Asp	Gly	Asn	Glu	Thr	Leu	Leu	Ser	Pro	Glu	Lys	Ser	Val
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Gln	Ile	Gln	Asn	Ala	Leu	Gly	Ser	Asp	Ile	Ile	Met	Gln	Leu	Asp	Asp
			165					170						175	
Val	Val	Ser	Ser	Thr	Val	Thr	Gly	Pro	Arg	Val	Glu	Glu	Ala	Met	Tyr
		180					185						190		
Arg	Ser	Ile	Arg	Trp	Leu	Asp	Arg	Cys	Ile	Ala	Ala	His	Gln	Arg	Pro
	195					200						205			
Asp	Lys	Gln	Asn	Leu	Phe	Ala	Ile	Ile	Gln	Gly	Gly	Leu	Asp	Ala	Asp
	210				215						220				
Leu	Arg	Ala	Thr	Cys	Leu	Glu	Glu	Met	Thr	Lys	Arg	Asp	Val	Pro	Gly

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 245 250 255
 Arg Met Val Ala Leu Ser Thr Ser Arg Leu Pro Lys Asp Lys Pro Arg
 260 265 270
 Tyr Leu Met Gly Val Gly Tyr Ala Thr Asp Leu Val Val Cys Val Ala
 275 280 285
 Leu Gly Cys Asp Met Phe Asp Cys Val Phe Pro Thr Arg Thr Ala Arg
 290 295 300
 Phe Gly Ser Ala Leu Val Pro Thr Gly Asn Leu Gln Leu Arg Lys Lys
 305 310 315 320
 Val Phe Glu Lys Asp Phe Gly Pro Ile Asp Pro Glu Cys Thr Cys Pro
 325 330 335
 Thr Cys Gln Lys His Ser Arg Ala Phe Leu His Ala Leu Leu His Ser
 340 345 350
 Asp Asn Thr Ala Ala Leu His His Leu Thr Val His Asn Ile Ala Tyr
 355 360 365
 Gln Leu Gln Leu Met Ser Ala Val Arg Thr Ser Ile Val Glu Lys Arg
 370 375 380
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 <211> 1419
 <212> DNA
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<210> 4014

<211> 473

<212> PRT

<213> Homo sapiens

<400> 4014

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			20					25					30		
Thr	Pro	Ala	Leu	Gln	Pro	Leu	Ser	Arg	Ala	Ser	Pro	Ile	Pro	Gly	Thr
		35					40					45			
Pro	Asp	Arg	Leu	Pro	Cys	Gln	Gln	Leu	Leu	Gln	Gln	Ala	Gln	Ala	Ala
	50					55				60					
Ile	Pro	Arg	Ser	Thr	Ser	Phe	Asp	Arg	Lys	Leu	Pro	Asp	Gly	Thr	Arg
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Ser	Ser	Pro	Ser	Asn	Gln	Ser	Ser	Ser	Ser	Asp	Pro	Gly	Pro	Gly	Gly
			85					90					95		
Ser	Gly	Pro	Trp	Arg	Pro	Gln	Val	Gly	Tyr	Asp	Gly	Cys	Gln	Ser	Pro
		100						105					110		
Leu	Leu	Leu	Glu	His	Gln	Gly	Ser	Gly	Pro	Leu	Glu	Cys	Asp	Gly	Ala
	115					120						125			
Arg	Glu	Arg	Glu	Asp	Thr	Met	Glu	Ala	Ser	Arg	His	Pro	Glu	Thr	Lys
	130					135					140				
Trp	His	Gly	Pro	Pro	Ser	Lys	Val	Leu	Gly	Ser	Tyr	Lys	Glu	Arg	Ala
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				165					170					175			
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			180						185					190			
Ser	Asn	Thr	Ser	Ser	Asn	Ser	Asp	Asp	Lys	His	Phe	Gly	Ser	Gly	Asp		
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	210					215					220						
Thr	Asp	Ser	Gly	Ile	Asp	Thr	Ala	Pro	Cys	Met	Pro	Ala	Thr	Ile	Leu		
225					230					235					240		
Gly	Pro	Val	His	Leu	Ala	Gly	Ser	Arg	Ser	Leu	Ile	His	Ser	Arg	Ala		
			245					250						255			
Glu	Gln	Trp	Ala	Asp	Ala	Ala	Asp	Val	Ser	Gly	Pro	Asp	Asp	Glu	Pro		
		260					265					270					
Ala	Lys	Leu	Tyr	Ser	Val	His	Gly	Tyr	Ala	Ser	Thr	Ile	Ser	Ala	Gly		
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Ser	Ala	Ala	Glu	Gly	Ser	Met	Gly	Asp	Leu	Ser	Glu	Ile	Ser	Ser	His		
	290					295					300						
Ser	Ser	Gly	Ser	His	His	Ser	Gly	Ser	Pro	Ser	Ala	His	Cys	Ser	Lys		
305					310					315					320		
Ser	Ser	Gly	Ser	Leu	Asp	Ser	Ser	Lys	Val	Tyr	Ile	Val	Ser	His	Ser		
			325					330						335			
Ser	Gly	Gln	Gln	Val	Pro	Gly	Ser	Met	Ser	Lys	Pro	Tyr	His	Arg	Gln		
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Gly	Ala	Val	Asn	Lys	Tyr	Val	Ile	Gly	Trp	Lys	Lys	Ser	Glu	Gly	Ser		
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Pro	Pro	Pro	Glu	Glu	Pro	Glu	Val	Thr	Glu	Cys	Pro	Gly	Met	Tyr	Ser		
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		420					425						430				
Phe	Ser	Phe	Tyr	Gly	Asn	Leu	Ser	Pro	Arg	Arg	Ser	Leu	Tyr	Arg	Thr		
	435					440						445					
Leu	Ser	Asp	Glu	Ser	Ile	Cys	Ser	Asn	Arg	Arg	Gly	Ser	Ser	Phe	Gly		
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<210> 4015

<211> 823

<212> DNA

<213> Homo sapiens

<400> 4015

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<211> 95

<212> PRT

<213> Homo sapiens

<400> 4016

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			20					25					30		
Asn	Arg	Arg	Met	Lys	Trp	Lys	Lys	Ile	Val	Leu	Gln	Gly	Gly	Gly	Leu
		35				40						45			
Glu	Ser	Pro	Thr	Lys	Pro	Lys	Gly	Arg	Pro	Lys	Lys	Asn	Ser	Ile	Pro
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Thr	Ser	Glu	Gln	Leu	Thr	Glu	Gln	Glu	Arg	Ala	Lys	Asp	Ala	Glu	Lys
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<210> 4017

<211> 1521

<212> DNA

<213> Homo sapiens

<400> 4017

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<211> 480

<212> PRT

<213> Homo sapiens

<400> 4018

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<212> PRT

<213> Homo sapiens

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			20					25					30		
Leu	Val	Cys	Gly	Leu	Leu	Leu	Val	Ile	Ala	Leu	Gly	Cys	Thr	Cys	Lys
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Gln Ile Leu Arg Gln Asp Met Thr Pro Gly Gly Gly Pro Gly Ala Arg
      115        120        125
Arg Arg Gln Arg Gly Arg Leu Met Arg Arg Leu Val Arg Arg Leu Arg
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145          150          155          160
Ala Arg Ser Gln Val Thr Pro Ser Ala Ala Pro Leu Glu Ala Leu Asp
      165        170        175
Gly Gly Thr Gly Pro Ala Arg Glu Gly Gly Ala Val Gly Gly Gln Asp
      180        185        190
Gly Glu Gln Ala Pro Pro Leu Pro Ile Lys Ala Pro Leu Pro Ser Ala
      195        200        205
Ser Thr Ser Pro Ala Pro Thr Thr Val Pro Glu Ala Pro Gly Pro Leu
210          215          220
Pro Ser Leu Pro Leu Glu Pro Ser Leu Leu Ser Gly Val Val Gln Ala
225          230          235          240
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Ser Pro Pro Gly Pro His Thr Ala Val Leu Ala Leu Glu Asp Glu Asp
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<210> 4021

<211> 4209

<212> DNA

<213> Homo sapiens

<400> 4021

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<211> 885

<212> PRT

<213> Homo sapiens

<400> 4022

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<211> 1690

<212> PRT

<213> Homo sapiens

<400> 4024

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Gln Glu Met Glu Lys Gln Gly Lys Tyr Arg Glu Ala Glu Arg Leu Tyr						
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Val Thr Val Gln Glu Pro Asp Leu Ala Ile Thr Met Tyr Lys Lys His						
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Lys Leu Tyr Asp Asp Met Ile Arg Leu Val Gly Lys His His Pro Asp						
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	965		970		975	
Gly Arg Leu Gln Glu Ala Glu Tyr His Tyr Leu Glu Ala Gln Glu Trp						
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Tyr Arg Val Ala Arg Thr Gln Gly Gly Ala Asn Ala His Lys His Val						
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Leu Asn Lys Leu Gly Leu Leu Glu Ala Ala Val Asp His Ala Ala Asp						
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Asn Cys Ser Phe Glu Phe Ala Phe Glu Leu Ser Arg Leu Ala Leu Lys						
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His Lys Thr Pro Glu Val His Leu Lys Tyr Ala Met Phe Leu Glu Asp						
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Glu Gly Lys Phe Glu Glu Ala Glu Ala Glu Phe Ile Arg Ala Gly Lys						
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<213> Homo sapiens

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<211> 302

<212> PRT

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<400> 4026

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<212> DNA

<213> Homo sapiens

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 420
 ccacccccgc agcgcaactc ggtgccgccc ccgcgcgcgc cgctgcacgg cccgcctggg
 480
 ncgccccac atgtcctcgc ccacgcgtga cccctgggac acgtgacagg gcccgcgcgg
 540
 ccccgacac gcccctgggg cgcagagaca ccgggttggc ttggggcgcg cggtttgc
 600
 gggatggggg gggggcgggc tcccctaggg acaggtgcct cgagtggccg tgcctggggg
 660
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 720
 accagcccgc cccagcgcgt gggctctgtt gggaggcctg ggccggagca gagcagaggt
 780
 gatccggccc ctgcctgctg ggccgcccgg gttggaaggg agggcagtgt gggcggagat
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 900
 aaagactcg
 909

<210> 4030

<211> 169

<212> PRT

<213> Homo sapiens

<400> 4030

Arg	Pro	Pro	Val	Leu	Gly	Gly	Ala	Gly	Pro	Ala	Gly	Pro	Ala	Gly	His
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Ala	Gly	Gln	Pro	Val	Gly	Ala	Ala	Ala	Leu	Arg	Ala	Ala	Ala	Val	Gly
			20					25					30		
Arg	Gly	Pro	His	Leu	Leu	Leu	Leu	Leu	His	Ala	Ala	Ala	Gly	Ala	Ala
			35					40					45		
Val	Arg	Gly	Ala	Gln	Arg	Gly	Gln	His	Ala	Gly	Arg	Ala	His	Ser	Ala
			50					55					60		
Ala	Glu	Asp	Asp	Ala	Val	Pro	Gly	Ala	Gln	Ser	Arg	His	Arg	Gln	Cys
65				70						75				80	
Gly	Gly	Pro	Cys	Trp	Arg	Ala	Pro	Pro	Thr	Trp	Arg	Cys	Ser	Gly	Thr
				85					90					95	
Ala	Val	Ser	Arg	Pro	Ser	Ser	Ser	Ala	Lys	Thr	Trp	Trp	Arg	Ser	Pro
			100					105					110		
Pro	Arg	Pro	Ala	Pro	Xaa	Pro	Gly	Val	Pro	Pro	Pro	Gly	Ala	Arg	Leu

	115		120		125	
Pro	Xaa	Pro	Pro	Ala	Leu	Ser
	130		135		140	
Arg	Asn	Ser	Val	Pro	Pro	Pro
145			150		155	
Xaa	Pro	Pro	His	Val	Leu	Ala
			165			

<210> 4031

<211> 1406

<212> DNA

<213> Homo sapiens

<400> 4031

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120
gagtttataaa aggaggagat gaggaagcta caaaaggaaac gtaaagtgtt tgaaaagtat
180
actacagctg caagaacttt tccagataaa aaggaacgtg aagaaatata gactttataaa
240
cagcaaatag cagatttacg ggaagatttg aaaagaaagg agaccaaata gtcaagtaca
300
cacagccgtc tcagaagcca gatacaaatg ttagtcagag agaacacaga cctccgggaa
360
gaaataaaaag tgatggaaaag attccgactg gatgcctgga agagagcaga agccatagag
420
agcagcctcg aggtggagaa gaaggacaag cttgcgaaca catctgttcg atttcaaaac
480
agtcagattt cttcaggaac ccaggtagaa aaatacaaga aaaattatct tccaatgcaa
540
ggcaatccac ctcgaagatc caagtctgca cctcctcgtg atttaggcaa tttggataag
600
ggacaggctg cctctcccag ggagccactt gaaccactga acttcccaga tcttgaatat
660
aaagaggagg aggaagacca agacatacag ggagaaatca gtcacctga tggaaagggtg
720
gaaaagggtt ataagaatgg gtgccgtgtt atactgtttc ccaatggaac tcgaaaggaa
780
gtgagtgcag atgggaagac catcactgtc actttcttta atggtgacgt gaagcaggtc
840
atgccagacc aaagagtgat ctactactat gcagctgccc agaccactca cagacatac
900
ccggaggggac tggaagtctt acattttctca agtggacaaa tagaaaaaca ttaccagat
960
ggaagaaaag aaatcacgtt tcttgaccag actgttaaaa acttatttcc tgatggacaa
1020
gaagaaaagca ttttcccaga tgggtacaatt gtcagagtac aacgtgatgg caacaaactc
1080
atagagttaa ataatggcca aagagaacta catactgccc agttcaagag acgggaatac
1140
ccagatggca ctgttaaaac cgtatatgca aacggtcac aagaaacgaa gtacagatcc
1200

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ggtcggataa gagttaagga caaggagggt aatgtgctaa tggacacgga gctgtgacga
 1260
 tcctcatgtg atcatgaagt aacagtaact gactttttat gttaaaaaat gtacattttac
 1320
 tgtggattct gtttaattta ttgtgtatgt gtggggaaaa gattggattc taaaataaaaa
 1380
 gtttaccctg tggcaaaaaa aaaaaa
 1406

<210> 4032

<211> 418

<212> PRT

<213> Homo sapiens

<400> 4032

Xaa	Ala	Glu	Asn	Ala	Ser	Leu	Ala	Lys	Leu	Arg	Ile	Glu	Arg	Glu	Ser
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Ala	Leu	Glu	Lys	Leu	Arg	Lys	Glu	Ile	Ala	Gly	Phe	Glu	Gln	Gln	Lys
			20					25					30		
Ala	Lys	Glu	Leu	Ala	Arg	Ile	Glu	Glu	Phe	Lys	Lys	Glu	Glu	Met	Arg
			35					40					45		
Lys	Leu	Gln	Lys	Glu	Arg	Lys	Val	Phe	Glu	Lys	Tyr	Thr	Thr	Ala	Ala
			50				55				60				
Arg	Thr	Phe	Pro	Asp	Lys	Lys	Glu	Arg	Glu	Glu	Ile	Gln	Thr	Leu	Lys
65					70					75					80
Gln	Gln	Ile	Ala	Asp	Leu	Arg	Glu	Asp	Leu	Lys	Arg	Lys	Glu	Thr	Lys
				85					90					95	
Trp	Ser	Ser	Thr	His	Ser	Arg	Leu	Arg	Ser	Gln	Ile	Gln	Met	Leu	Val
			100					105					110		
Arg	Glu	Asn	Thr	Asp	Leu	Arg	Glu	Glu	Ile	Lys	Val	Met	Glu	Arg	Phe
			115					120				125			
Arg	Leu	Asp	Ala	Trp	Lys	Arg	Ala	Glu	Ala	Ile	Glu	Ser	Ser	Leu	Glu
			130				135				140				
Val	Glu	Lys	Lys	Asp	Lys	Leu	Ala	Asn	Thr	Ser	Val	Arg	Phe	Gln	Asn
145					150					155					160
Ser	Gln	Ile	Ser	Ser	Gly	Thr	Gln	Val	Glu	Lys	Tyr	Lys	Lys	Asn	Tyr
				165					170					175	
Leu	Pro	Met	Gln	Gly	Asn	Pro	Pro	Arg	Arg	Ser	Lys	Ser	Ala	Pro	Pro
			180					185					190		
Arg	Asp	Leu	Gly	Asn	Leu	Asp	Lys	Gly	Gln	Ala	Ala	Ser	Pro	Arg	Glu
			195				200					205			
Pro	Leu	Glu	Pro	Leu	Asn	Phe	Pro	Asp	Pro	Glu	Tyr	Lys	Glu	Glu	Glu
			210			215					220				
Glu	Asp	Gln	Asp	Ile	Gln	Gly	Glu	Ile	Ser	His	Pro	Asp	Gly	Lys	Val
225					230					235					240
Glu	Lys	Val	Tyr	Lys	Asn	Gly	Cys	Arg	Val	Ile	Leu	Phe	Pro	Asn	Gly
				245					250					255	
Thr	Arg	Lys	Glu	Val	Ser	Ala	Asp	Gly	Lys	Thr	Ile	Thr	Val	Thr	Phe
			260					265					270		
Phe	Asn	Gly	Asp	Val	Lys	Gln	Val	Met	Pro	Asp	Gln	Arg	Val	Ile	Tyr
			275				280					285			
Tyr	Tyr	Ala	Ala	Ala	Gln	Thr	Thr	His	Thr	Thr	Tyr	Pro	Glu	Gly	Leu
			290			295					300				
Glu	Val	Leu	His	Phe	Ser	Ser	Gly	Gln	Ile	Glu	Lys	His	Tyr	Pro	Asp


```

305          310          315          320
Gly Arg Lys Glu Ile Thr Phe Pro Asp Gln Thr Val Lys Asn Leu Phe
          325          330          335
Pro Asp Gly Gln Glu Glu Ser Ile Phe Pro Asp Gly Thr Ile Val Arg
          340          345          350
Val Gln Arg Asp Gly Asn Lys Leu Ile Glu Phe Asn Asn Gly Gln Arg
          355          360          365
Glu Leu His Thr Ala Gln Phe Lys Arg Arg Glu Tyr Pro Asp Gly Thr
          370          375          380
Val Lys Thr Val Tyr Ala Asn Gly His Gln Glu Thr Lys Tyr Arg Ser
385          390          395          400
Gly Arg Ile Arg Val Lys Asp Lys Glu Gly Asn Val Leu Met Asp Thr
          405          410          415
Glu Leu

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<210> 4033
 <211> 487
 <212> DNA
 <213> Homo sapiens

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<400> 4033
acgcgtgaag ggacaacttc gcagagttcg gctactgctg acgcgcaggg agtaagcctc
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gggttttgat gggatagcag acaggtggat tgcagagctc cggaaagacc cagccggggtg
120
tcaagaagag cctcctagt ttggcctcta actggctgtg cgaccccagg caggtcactt
180
gtcctctctg ggaagcagct gaataatgaa cactgggatt ttcccaggct ggcttctcac
240
tgcagagcag aggaaaagca ttctgggggc ctgctatgga gggtcattta tccagtttac
300
aacttccacg gccggccctc aatggcttcc tttctctccc acaagagcgc tgggccaagc
360
cagctctgca ccagttggac gccttccaag aaaaactcag gctccggggg ctgcttgtca
420
ggaccagacg ggaggcctgg cgccccgcc cgccatgtgt ggggagcggg cctctccaag
480
ccagtcc
487

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<210> 4034
 <211> 94
 <212> PRT
 <213> Homo sapiens

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<400> 4034
Met Asn Thr Gly Ile Phe Pro Gly Trp Leu Leu Thr Ala Glu Gln Arg
1          5          10          15
Lys Ser Ile Leu Gly Ala Cys Tyr Gly Gly Ser Phe Ile Gln Phe Thr
          20          25          30
Thr Ser Thr Ala Gly Pro Gln Trp Leu Pro Phe Ser Pro Thr Arg Ala
          35          40          45
Leu Gly Gln Ala Ser Ser Ala Pro Val Gly Arg Leu Pro Arg Lys Thr

```

```

      50              55              60
Gln Ala Pro Gly Ala Ala Cys Gln Asp Gln Thr Gly Gly Leu Ala Pro
65              70              75              80
Pro Pro Ala Met Cys Gly Glu Arg Ala Ser Pro Ser Gln Ser
      85              90

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<210> 4035
 <211> 343
 <212> DNA
 <213> Homo sapiens

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<400> 4035
nnncttaata gcagtgttat ggaattccat gtgaggcaca aacattcaga caatcctagc
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aatgttcttg aatcctatgt gagggacaaa cattcagacc ccagcagcaa tgttctggaa
120
tcctatggga gggacaaact ctcagaaaat agcaagagta ttttggaaac ctatctgagg
180
tataaacact cagaacctca tagcagtgtt caggaatcct atgtgagggg caaacattca
240
gaccacagca ggagcattct agaatcctat ttgaggaaca aacattcaga caatcgtagc
300
agtgttcttg aatccttttt ttttttgaag ctttcaatct ctt
343

```

<210> 4036
 <211> 114
 <212> PRT
 <213> Homo sapiens

```

<400> 4036
Xaa Leu Asn Ser Ser Val Met Glu Phe His Val Arg His Lys His Ser
1      5      10      15
Asp Asn Pro Ser Asn Val Leu Glu Ser Tyr Val Arg Asp Lys His Ser
20     25     30
Asp Pro Ser Ser Asn Val Leu Glu Ser Tyr Gly Arg Asp Lys Leu Ser
35     40     45
Glu Asn Ser Lys Ser Ile Leu Glu Ser Tyr Leu Arg Tyr Lys His Ser
50     55     60
Glu Pro His Ser Ser Val Gln Glu Ser Tyr Val Arg Asp Lys His Ser
65     70     75     80
Asp His Ser Arg Ser Ile Leu Glu Ser Tyr Leu Arg Asn Lys His Ser
85     90     95
Asp Asn Arg Ser Ser Val Leu Glu Ser Phe Phe Phe Leu Lys Leu Ser
100    105    110
Ile Ser

```

<210> 4037
 <211> 741
 <212> DNA
 <213> Homo sapiens

<400> 4037

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 60
 tcatcataaa ggtcttcatt ctcacacctct tcacgttgag taggctgagg aggaggaaga
 120
 ggaggagaag gggttggtct tgctgtctca gggcggcaga ggcagaagag aatctgagca
 180
 tacgtggacc tgtagccagg tgggcataga taaaaggaaa tattgtttgc cagtcacctgc
 240
 tggaatgatg cctttacaca tctgtctgat ctgattgctc cactgttttc tgacttctct
 300
 tccctttcca gggttctagc ctgttcatct agcccatga tggctgtgga catcgagtac
 360
 agatacaact gcatggctcc ttccttgccg caagagaggt ttgcctttaa gatctcacca
 420
 aagcccagca aaccactgag gccttgattt cagctgagca gcaagaatga agccagtggg
 480
 atgggtggccc cggctgtcca ggagaagaag gtgaaaaagc ggggtgtcctt cgcagacaac
 540
 caggggctgg ccctgacaat ggtcaaagtg ttctcggaat tcgatgaccc gctagatatg
 600
 ccattcaaca tcaccgagct cctagacaac attgtgagct tgacgacagc agagagcgag
 660
 agctttgttc tggatttttc ccagccctct gcagattact tagactttag aaatcgactt
 720
 caggccgacc acgtctgcct t
 741

<210> 4038

<211> 134

<212> PRT

<213> Homo sapiens

<400> 4038

Met	Ala	Val	Asp	Ile	Glu	Tyr	Arg	Tyr	Asn	Cys	Met	Ala	Pro	Ser	Leu
1				5					10					15	
Arg	Gln	Glu	Arg	Phe	Ala	Phe	Lys	Ile	Ser	Pro	Lys	Pro	Ser	Lys	Pro
			20					25					30		
Leu	Arg	Pro	Cys	Ile	Gln	Leu	Ser	Ser	Lys	Asn	Glu	Ala	Ser	Gly	Met
		35					40					45			
Val	Ala	Pro	Ala	Val	Gln	Glu	Lys	Lys	Val	Lys	Lys	Arg	Val	Ser	Phe
	50				55						60				
Ala	Asp	Asn	Gln	Gly	Leu	Ala	Leu	Thr	Met	Val	Lys	Val	Phe	Ser	Glu
65				70					75					80	
Phe	Asp	Asp	Pro	Leu	Asp	Met	Pro	Phe	Asn	Ile	Thr	Glu	Leu	Leu	Asp
				85				90					95		
Asn	Ile	Val	Ser	Leu	Thr	Thr	Ala	Glu	Ser	Glu	Ser	Phe	Val	Leu	Asp
		100					105					110			
Phe	Ser	Gln	Pro	Ser	Ala	Asp	Tyr	Leu	Asp	Phe	Arg	Asn	Arg	Leu	Gln
	115					120					125				
Ala	Asp	His	Val	Cys	Leu										
	130														

<210> 4039

<211> 1503

<212> DNA

<213> Homo sapiens

<400> 4039

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120
gagcgaggag ccctcgcacg cgctagtctg cgagtgagcg ctccagcccgg cacctgttcc
180
tccagcgccg ccgccttccc acccctcgga cccgcggcgc tcgcggcgcc cgcccgttcc
240
tgcatgaat ccggccctag gcaaccagac ggacgtggcg ggcccttctg gccaacagca
300
gcgaggcgct ggagcgagcc gtgcgctgct gaccccaggc gtccgtggtg accgacgacg
360
gcttcgcgga gggaggcccc gacgagcgta gcctgtacat aatgcgcgtg gtgcagatcg
420
cggtcacgtg cgtgctctca ctccacgtgg tcttcggcat cttcttcttc ggctgcaatc
480
tgctcatcaa gtccgagggc atgatcaact tctcgtgaa ggaccggagg ccgtctaagg
540
agggtggaggc ggtggtcgtg gggccctact gaccgcacct ctgccccgcg ggcaaccgct
600
cccacgcctg ccacttttgc tagcccggtg gtgccccca ctatcagaga ctgggcgaag
660
caaacctgtc ggagtcaatt atttctctcg acttcggcct ttcggaaaga agcgaccggt
720
ttctccctcg ccctctgaaa gtcctcatgc ctggcagtcg gaggagagcg cccagactct
780
gaactcagca gaaagtggca agaagagggc gattagggcg cagaactttg gaagctgcta
840
cttacttgga atgcggggag accgacggtg cgaaggccct tctccaccgc cagggtgggc
900
aagctctggg ggcaggtgga gaggcgggc aggggagaga cccagcggca ctgatcgct
960
tgtgaccgga agagtgacct gttaaaagcc acgcagcaga ctcatggggt ctcaaaatc
1020
cgtgtccggg tgcgtccca ctcttctcct gctcccccc tgccctgga ggggagggg
1080
gataaatacc tttgattgta acgtgccgtt ttaagaggtt ttgtgtttgt ttgcttgaat
1140
acaaatgttt gataagtctt tttctgcccc agtggcctgt ttgcctgcct gaggagttac
1200
agttttgtca ttgtggaaga aggggtgggg ggagggggag cctgcgaatt tgaacgggg
1260
gagttgtttc ttttagtgca tttccactg ggtcttttgg gaggcgtcta gcgttctgc
1320
tggccctggg acaaagacct agaatagaac tcgtagctcg tgactgcacg gtttacgcca
1380
caaaagtgtc cttgacatcc gtgacaccgt tttgactttt tgtttttttc ttatttaaca
1440
tttcttaat aaatgcaaca tttaagcgtt aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
1500

aaa
1503

<210> 4040
<211> 100
<212> PRT
<213> Homo sapiens

<400> 4040
Lys Ser Leu Ala Ala Ala Arg Val Gly Glu Ala Pro Gly Glu Thr Pro
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Thr Ala Gln Gly Leu Ser Lys Ala Glu Arg Gly Ala Leu Ala Arg Ala
20 25 30
Ser Leu Arg Val Ser Ala Gln Pro Gly Thr Cys Ser Ser Ser Ala Ala
35 40 45
Ala Phe Pro Pro Leu Gly Pro Ala Pro Leu Ala Ala Pro Ala Arg Ser
50 55 60
Cys Asp Glu Ser Gly Pro Arg Gln Pro Asp Gly Arg Gly Gly Pro Ser
65 70 75 80
Trp Pro Thr Ala Ala Arg Arg Trp Ser Glu Pro Cys Ala Ala Ala Pro
85 90 95
Arg Arg Pro Trp
100

<210> 4041
<211> 573
<212> DNA
<213> Homo sapiens

<400> 4041
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ggtgagattc cagctgaatt aagggcggcg gccactgacc accggcagga gctaattgaa
120
tgtgttgcca attcagatga acagcttggt gagatgtttc tggaagaaaa aatcccctcg
180
atttctgatt taaagctagc aattcgaaga gctactctga aaagatcatt tactcctgta
240
tttttgggaa ggccttgaa gaacaaagga gtccagcctc ttttagatgc tgttttagaa
300
tacctcccaa atccatctga agtccagaac tatgctattc tcaataaaga ggatgactca
360
aaagagaaaa ccaaaatcct aatgaactcc agtagagaca attcccaccc atttgtaggc
420
ctggctttta aactggaggt aggtcgattt ggacaattaa cttatgttcg cagttatcag
480
ggagagctaa agaagggtga caccatctat aacacaagga caagaaagaa agtacggttg
540
caacggctgg ctgcgatgca tgccgacatg atg
573

<210> 4042
<211> 191
<212> PRT

<213> Homo sapiens

<400> 4042

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Asp Leu Ile Glu Glu Arg Ala Ile Tyr Phe Asp Gly Asp Phe Gly Gln
 1           5           10           15
Ile Val Arg Tyr Gly Glu Ile Pro Ala Glu Leu Arg Ala Ala Thr
      20           25           30
Asp His Arg Gln Glu Leu Ile Glu Cys Val Ala Asn Ser Asp Glu Gln
      35           40           45
Leu Gly Glu Met Phe Leu Glu Glu Lys Ile Pro Ser Ile Ser Asp Leu
      50           55           60
Lys Leu Ala Ile Arg Arg Ala Thr Leu Lys Arg Ser Phe Thr Pro Val
      65           70           75           80
Phe Leu Gly Ser Ala Leu Lys Asn Lys Gly Val Gln Pro Leu Leu Asp
      85           90           95
Ala Val Leu Glu Tyr Leu Pro Asn Pro Ser Glu Val Gln Asn Tyr Ala
      100          105          110
Ile Leu Asn Lys Glu Asp Asp Ser Lys Glu Lys Thr Lys Ile Leu Met
      115          120          125
Asn Ser Ser Arg Asp Asn Ser His Pro Phe Val Gly Leu Ala Phe Lys
      130          135          140
Leu Glu Val Gly Arg Phe Gly Gln Leu Thr Tyr Val Arg Ser Tyr Gln
      145          150          155          160
Gly Glu Leu Lys Lys Gly Asp Thr Ile Tyr Asn Thr Arg Thr Arg Lys
      165          170          175
Lys Val Arg Leu Gln Arg Leu Ala Arg Met His Ala Asp Met Met
      180          185          190

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<210> 4043

<211> 744

<212> DNA

<213> Homo sapiens

<400> 4043

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nntgcctggc ccagtctctc ccgcctcggc ccaacatgga cttcagagaa attctcatga
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tagcttccaa gggacaaggt gtcaacaatg tgccgaaaag ggatagttgg ccagtggggc
120
ctcccaaaaa aagaccctaa agttaaaggt gtccaatcag cagctgtaca agcttttctt
180
aaaaggaaaag aagaggagct gagacgaaaa gccttagagg agaaaaggag aaaagaggaa
240
ctagtgaaaa agcgaattga gctcaaaccat gacaagaaaag caagagctat ggccaagagg
300
acaaaggata atttccatgg ttacaatggg attcctattg aggaaaagtc aaagaagagg
360
caggcaacag aaagccatac cagccaagga accgaccgag agtatgaaat ggaagaagag
420
aatgaattcc tcgagtacaa tcacgcagag tcagagcagg agtatgagga agagcaagaa
480
cctcccaaag ttgaaagcaa accaaagggt tcccttaaag gtgccccacc acctatgaac
540
ttcactgatt tactcaggct ggctgagaaa aagcagtttg aaccagtgga aatcaaggta
600

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gtgaagaaat cagaagagcg acctatgacc gcagaagaac ttagggagcg agaattcctt
 660
 gaacgaaagc ataggagaaa aaaacttgag acagatggaa aactacctcc aactgtgtcc
 720
 aaaaaggcac ctctcggacg gaag
 744

<210> 4044
 <211> 219
 <212> PRT
 <213> Homo sapiens

<400> 4044
 Met Cys Arg Lys Gly Ile Val Gly Gln Trp Gly Leu Pro Lys Lys Asp
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 Pro Lys Val Lys Gly Val Gln Ser Ala Ala Val Gln Ala Phe Leu Lys
 20 25 30
 Arg Lys Glu Glu Glu Leu Arg Arg Lys Ala Leu Glu Glu Lys Arg Arg
 35 40 45
 Lys Glu Glu Leu Val Lys Lys Arg Ile Glu Leu Lys His Asp Lys Lys
 50 55 60
 Ala Arg Ala Met Ala Lys Arg Thr Lys Asp Asn Phe His Gly Tyr Asn
 65 70 75 80
 Gly Ile Pro Ile Glu Glu Lys Ser Lys Lys Arg Gln Ala Thr Glu Ser
 85 90 95
 His Thr Ser Gln Gly Thr Asp Arg Glu Tyr Glu Met Glu Glu Glu Asn
 100 105 110
 Glu Phe Leu Glu Tyr Asn His Ala Glu Ser Glu Gln Glu Tyr Glu Glu
 115 120 125
 Glu Gln Glu Pro Pro Lys Val Glu Ser Lys Pro Lys Val Ser Leu Lys
 130 135 140
 Gly Ala Pro Pro Pro Met Asn Phe Thr Asp Leu Leu Arg Leu Ala Glu
 145 150 155 160
 Lys Lys Gln Phe Glu Pro Val Glu Ile Lys Val Val Lys Lys Ser Glu
 165 170 175
 Glu Arg Pro Met Thr Ala Glu Glu Leu Arg Glu Arg Glu Phe Leu Glu
 180 185 190
 Arg Lys His Arg Arg Lys Lys Leu Glu Thr Asp Gly Lys Leu Pro Pro
 195 200 205
 Thr Val Ser Lys Lys Ala Pro Leu Gly Arg Lys
 210 215

<210> 4045
 <211> 2217
 <212> DNA
 <213> Homo sapiens

<400> 4045
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 60
 tcttcaagga catgatgtgg aagtcttgac ttgagtaact tcaatagcac taacaacagg
 120
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<212> PRT

<213> Homo sapiens

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 Lys Val Tyr Val Gln Leu Trp Arg Arg Leu Lys Ala Tyr Asn Arg Val
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 Ile Phe Val Gln Asn Cys Pro Asp Thr Ala Lys Lys Leu Glu Lys Asn
 65 70 75 80
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<211> 403

<212> PRT

<213> Homo sapiens

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Cys	Asn	Lys	Phe	Ile	Ala	Tyr	Ser	Thr	Val	Phe	Glu	Asp	Val	Val	Asp
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Phe	Lys	Lys	Asn	Leu	Phe	Glu	Met	Ala	Ile	Asn	Leu	Ala	Lys	Ser	Gln
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Arg	Thr	Ile	Gly	Lys	Leu	Glu	Pro	Ser	Tyr	Val	Ile	Arg	Lys	Phe	Leu
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Pro Ser Leu Glu Gly Arg	Ser Asp Arg Glu Ala	Pro Gly Cys Arg Ala
340	345	350
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355	360	365
Lys Ala Phe Leu Glu His	Met Ser Glu Val Gln	Pro Asp Ser Pro Gln
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<212> PRT

<213> Homo sapiens

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<211> 2434

<212> PRT

<213> Homo sapiens

<400> 4056

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Cys	Phe	Ala	Ser	Leu	Ala	Asp	Arg	Phe	Thr	Arg	Arg	Gly	Val	Asp	Pro	35	40	45	
Ala	Pro	Leu	Ala	Lys	His	Gly	Leu	Thr	Glu	Glu	Leu	Leu	Ser	Arg	Met	50	55	60	
Ala	Ala	Ala	Gly	Gly	Thr	Val	Ser	Gly	Pro	Ser	Ser	Ala	Cys	Lys	Pro	65	70	75	80
Gly	Arg	Ser	Thr	Thr	Gly	Ala	Pro	Ser	Thr	Thr	Ala	Asp	Ser	Lys	Leu	85	90	95	
Ser	Asn	Gln	Val	Ser	Thr	Ile	Val	Ser	Leu	Leu	Ser	Thr	Leu	Cys	Arg	100	105	110	
Gly	Ser	Pro	Val	Val	Thr	His	Asp	Leu	Leu	Arg	Ser	Glu	Leu	Pro	Asp	115	120	125	
Ser	Ile	Glu	Ser	Ala	Leu	Gln	Gly	Asp	Glu	Arg	Cys	Val	Leu	Asp	Thr	130	135	140	
Met	Arg	Leu	Val	Asp	Leu	Leu	Leu	Val	Leu	Leu	Phe	Glu	Gly	Arg	Lys	145	150	155	160
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Cys	Ile	Arg	Ser	Lys	Asp	Thr	Asp	Ala	Leu	Ile	Asp	Ala	Ile	Asp	Thr	195	200	205	
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3239

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Gly Leu Phe Thr Ala Pro Phe Pro Gln Asp Ser Asp Glu Leu Glu Arg		
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Ile Thr Lys Leu Phe His Phe Leu Gly Ile Phe Leu Ala Lys Cys Ile		
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Gln Asp Asn Arg Leu Val Asp Leu Pro Ile Ser Lys Pro Phe Phe Lys		2080
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Asn Pro His Arg Ala Arg Phe Leu Lys Glu Ile Lys Asp Leu Ala Ile		2175
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Lys Arg Arg Gln Ile Leu Ser Asn Lys Gly Leu Ser Glu Asp Glu Lys		2190
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Phe Ser His Glu Glu Val Gln Met Ile Leu Cys Gly Asn Gln Ser Pro		2300
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Thr Val Val Arg Lys Val Asp Ala Thr Asp Ala Ser Tyr Pro Ser Val		2380
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<211> 533

<212> DNA

<213> Homo sapiens

<400> 4057

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<213> Homo sapiens

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			20					25					30		
Phe	Ser	Asn	Ile	Ser	Ser	Ile	Tyr	Gln	Phe	His	Ser	Gln	Phe	Phe	Leu
		35				40						45			
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65					70					75					80
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<211> 714

<212> PRT

<213> Homo sapiens

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Pro	Thr	Arg	Ala	Gly	Asn	Ser	Thr	Pro	Arg	Met	Gln	Phe	Val	Ser	Thr
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Leu	Leu	Ser	Leu	Glu	Gly	Gln	Thr	Gly	Met	Ala	Glu	Lys	Lys	Leu
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Asp	Cys	Glu	Lys	Thr	Ala	Val	Glu	Phe	Gly	Asn	Gln	Leu	Glu	Lys
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Trp	Ala	Val	Leu	Gly	Thr	Leu	Leu	Gln	Glu	Tyr	Gly	Leu	Leu	Gln
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Tyr Thr Cys Gly Glu Cys Gly Lys Ser Phe Arg Tyr Lys Glu Ser Leu
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<210> 4061

<211> 519

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<210> 4064
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 <212> PRT
 <213> Homo sapiens

<400> 4064

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Met Cys Cys Pro Ser Arg Ser Ser Ile Leu Thr Gly Lys Tyr Val His
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Gly Tyr Arg Thr Ala Phe Phe Gly Lys Tyr Leu Asn Glu Tyr Asn Gly
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Thr Pro Ser Tyr Asn Tyr Ala Pro Asp Pro Asp Lys His Trp Ile Met
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Phe Tyr Val Arg Gly Pro Asn Val Glu Ala Gly Cys Leu Asn Pro His
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Ile Val Leu Asn Ile Asp Leu Ala Pro Thr Ile Leu Asp Ile Ala Gly
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Leu Asp Ile Pro Ala Asp Met Asp Gly Lys Ser Ile Leu Lys Leu Leu
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Asp Thr Glu Arg Pro Val Asn Arg Phe His Leu Lys Lys Lys Met Arg
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Val Trp Arg Asp Ser Phe Leu Val Glu Arg Gly Lys Leu Leu His Lys
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Arg Asp Asn Asp Lys Val Asp Ala Gln Glu Glu Asn Phe Leu Pro Lys

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Ala Cys Thr Cys Asp Ser Gly Asp Tyr Lys Leu Ser Leu Ala Gly Arg		
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His Trp Pro Gly Ala Pro Glu Asp Gln Asp Asp Lys Asp Gly Gly Asp		
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530	535	540
Ile Lys Val Thr His Arg Cys Tyr Ile Leu Glu Asn Asp Thr Val Gln		
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Cys Asp Leu Asp Leu Tyr Lys Ser Leu Gln Ala Trp Lys Asp His Lys		
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Leu His Ile Asp His Glu Ile Glu Thr Leu Gln Asn Lys Ile Lys Asn		
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Leu Thr Cys Phe Thr His Asp Asn Gln His Trp Gln Thr Ala Pro Phe		
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Trp Thr Leu Gly Pro Phe Cys Ala Cys Thr Ser Ala Asn Asn Asn Thr		
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Tyr Trp Cys Met Arg Thr Ile Asn Glu Thr His Asn Phe Leu Phe Cys		
705	710	715
Glu Phe Ala Thr Gly Phe Leu Glu Tyr Phe Asp Leu Asn Thr Asp Pro		
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Tyr Gln Leu Met Asn Ala Val Asn Thr Leu Asp Arg Asp Val Leu Asn		
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Gln Leu His Val Gln Leu Met Glu Leu Arg Ser Cys Lys Gly Tyr Lys		
755	760	765
Gln Cys Asn Pro Arg Thr Arg Asn Met Asp Leu Gly Leu Lys Asp Gly		
770	775	780
Gly Ser Tyr Glu Gln Tyr Arg Gln Phe Gln Arg Arg Lys Trp Pro Glu		
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<210> 4065
<211> 696
<212> DNA
<213> Homo sapiens

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<212> PRT
<213> Homo sapiens

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Phe Pro Leu Leu Leu Asn Cys Phe Gly Gln Pro Gly Thr Lys Trp Ile
35 40 45
Pro Phe Ser Tyr Thr Tyr Arg Arg Pro Leu Arg Thr His Tyr Gly Tyr
50 55 60
Ile Asn Val Lys Thr Gln Glu Pro Leu Gln Leu Asp Cys Asp Leu Cys
65 70 75 80
Ala Ile Val Ser Asn Ser Gly Gln Met Val Gly Gln Lys Val Gly Asn
85 90 95
Glu Ile Asp Arg Ser Ser Cys Ile Trp Arg Met Asn Asn Ala Pro Thr

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		115					120					125					
Ser	His	Thr	Ser	Val	Pro	Leu	Leu	Lys	Asn	Pro	Asp	Tyr	Phe	Phe			
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Lys	Glu	Ala	Asn	Thr	Thr	Ile	Tyr	Val	Ile	Trp	Gly	Pro	Phe	Arg	Asn		
145					150					155					160		
Met	Arg	Lys	Asp	Gly	Asn	Gly	Ile	Val	Tyr	Asn	Met	Leu	Lys	Lys	Thr		
			165						170					175			
Val	Gly	Ile	Tyr	Pro	Asn	Ala	Gln	Ile	Tyr	Val	Thr	Thr	Glu	Lys	Arg		
			180					185					190				
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<210> 4067

<211> 1800

<212> DNA

<213> Homo sapiens

<400> 4067

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<210> 4068

<211> 521

<212> PRT

<213> Homo sapiens

<400> 4068

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Val	Leu	Lys	Ile	Ile	Thr	Phe	Thr	Lys	Asn	Asn	Gln	Phe	Gln	Ala Leu
			180					185					190	
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Thr	Lys	Asp	Phe	Ser	Asn	Ser	Pro	Leu	His	Arg	Phe	Lys	Lys	Pro Gly
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Ser	Lys	Asn	Phe	Gln	Asn	Ile	Phe	Pro	Pro	Ser	Ala	Thr	Leu	His Leu
		435					440					445		
Ser	Asn	Ile	Pro	Pro	Ser	Val	Thr	Val	Asp	Asp	Leu	Lys	Asn	Leu Phe
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Ile	Glu	Ala	Gly	Cys	Ser	Val	Lys	Ala	Phe	Lys	Phe	Phe	Gln	Lys Asp
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Arg	Lys	Met	Ala	Leu	Ile	Gln	Leu	Gly	Ser	Val	Glu	Glu	Ala	Ile Gln
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Ala	Leu	Ile	Glu	Leu	His	Asn	His	Asp	Leu	Gly	Glu	Asn	His	His Leu
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<211> 714

<212> DNA

<213> Homo sapiens

<400> 4069

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<210> 4070

<211> 113

<212> PRT

<213> Homo sapiens

<400> 4070

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			20					25					30		
Leu	Tyr	Thr	Ile	Phe	Ile	Val	Ala	Thr	Lys	Ile	Thr	Met	Met	Thr	Thr
		35					40					45			
Gln	Thr	Ser	Thr	Met	Thr	Phe	Ala	Pro	Phe	Glu	Asp	Thr	Leu	Ser	Trp
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Met	Leu	Phe	Gly	Trp	Gln	Gln	Pro	Phe	Ser	Ser	Cys	Glu	Lys	Lys	Ser
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Glu	Ala	Lys	Ser	Pro	Ser	Asn	Gly	Val	Gly	Ser	Leu	Ala	Ser	Lys	Pro
			85				90						95		
Val	Asp	Val	Ala	Ser	Asp	Asn	Val	Lys	Lys	Lys	His	Thr	Lys	Lys	Asn
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Glu

<210> 4071

<211> 601

<212> DNA

<213> Homo sapiens

<400> 4071

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<210> 4072
 <211> 175
 <212> PRT
 <213> Homo sapiens

<400> 4072
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 35 40 45
 Gln Ala Leu Lys Ala Arg Met Thr Ser Phe His Arg Phe Phe Phe Thr
 50 55 60
 Ala Asn Gln Val Lys Ile Tyr Thr Asn Gln Glu Lys Thr Arg Thr Phe
 65 70 75 80
 Ile Gly Leu Glu Val Thr Ser Gly His Ala Gln Phe Leu Asp Leu Val
 85 90 95
 Ser Glu Val Asp Arg Val Met Glu Glu Phe Asn Leu Thr Thr Phe Tyr
 100 105 110
 Gln Asp Pro Ser Phe His Leu Ser Leu Ala Trp Cys Val Gly Asp Ala
 115 120 125
 Arg Leu Gln Leu Glu Gly Gln Cys Leu Gln Glu Leu Gln Ala Ile Val
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 Asp Gly Phe Glu Asp Ala Glu Val Leu Leu Arg Val His Thr Glu Gln
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<210> 4073
 <211> 1864

<212> DNA

<213> Homo sapiens

<400> 4073

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 attg
 1864

<210> 4074
 <211> 456
 <212> PRT
 <213> Homo sapiens

<400> 4074
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 35 40 45
 Ser Thr Met Pro Ser Gln Thr Val Leu Pro Pro Glu Pro Val Gln Leu
 50 55 60
 Cys Lys Ser Glu Gln Arg Pro Ser Ser Leu Pro Val Gly Pro Val Leu
 65 70 75 80
 Ala Thr Leu Gly His His Gln Thr Pro Thr Pro Asn Ser Thr Gly Ser
 85 90 95
 Gly His Ser Pro Pro Ser Ser Ser Leu Thr Ser Pro Ser His Val Asn
 100 105 110
 Leu Ser Pro Asn Thr Val Pro Glu Phe Ser Tyr Ser Ser Ser Glu Asp
 115 120 125
 Glu Phe Tyr Asp Ala Asp Glu Phe His Gln Ser Gly Ser Ser Pro Lys
 130 135 140
 Arg Leu Ile Asp Ser Ser Gly Ser Ala Ser Val Leu Thr His Ser Ser
 145 150 155 160
 Ser Gly Asn Ser Leu Lys Arg Pro Asp Thr Thr Glu Ser Leu Asn Ser
 165 170 175
 Ser Leu Ser Asn Gly Thr Ser Asp Ala Asp Leu Phe Asp Ser His Asp
 180 185 190
 Asp Arg Asp Asp Asp Ala Glu Ala Gly Ser Val Glu Glu His Lys Ser
 195 200 205
 Val Ile Met His Leu Leu Ser Gln Val Arg Leu Gly Met Asp Leu Thr
 210 215 220
 Lys Val Val Leu Pro Thr Phe Ile Leu Glu Arg Arg Ser Leu Leu Glu
 225 230 235 240
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<210> 4075
<211> 2492
<212> DNA
<213> Homo sapiens
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180
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240
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300
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360
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480
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600
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660

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2280

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<210> 4076

<211> 410

<212> PRT

<213> Homo sapiens

<400> 4076

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Pro	Arg	Trp	Ala	Ser	Trp	Asn	Ile	Gly	Val	Phe	Ile	Cys	Ile	Arg	Cys	20	25	30	
Ala	Gly	Ile	His	Arg	Asn	Leu	Gly	Val	His	Ile	Ser	Arg	Val	Lys	Ser	35	40	45	
Val	Asn	Leu	Asp	Gln	Trp	Thr	Gln	Glu	Gln	Ile	Gln	Cys	Met	Gln	Glu	50	55	60	
Met	Gly	Asn	Gly	Lys	Ala	Asn	Arg	Leu	Tyr	Glu	Ala	Tyr	Leu	Pro	Glu	65	70	75	80
Thr	Phe	Arg	Arg	Pro	Gln	Ile	Asp	Pro	Ala	Val	Glu	Gly	Phe	Ile	Arg	85	90	95	
Asp	Lys	Tyr	Glu	Lys	Lys	Lys	Tyr	Met	Asp	Arg	Ser	Leu	Asp	Ile	Asn	100	105	110	
Ala	Phe	Arg	Lys	Glu	Lys	Asp	Asp	Lys	Trp	Lys	Arg	Gly	Ser	Glu	Pro	115	120	125	
Val	Pro	Glu	Lys	Lys	Leu	Glu	Pro	Val	Val	Phe	Glu	Lys	Val	Lys	Met	130	135	140	
Pro	Gln	Lys	Lys	Glu	Asp	Pro	Gln	Leu	Pro	Arg	Lys	Ser	Ser	Pro	Lys	145	150	155	160
Ser	Thr	Ala	Pro	Val	Met	Asp	Leu	Leu	Gly	Leu	Asp	Ala	Pro	Val	Ala	165	170	175	
Cys	Ser	Ile	Ala	Asn	Ser	Lys	Thr	Ser	Asn	Thr	Leu	Glu	Lys	Asp	Leu	180	185	190	
Asp	Leu	Leu	Ala	Ser	Val	Pro	Ser	Pro	Ser	Ser	Ser	Gly	Ser	Arg	Lys	195	200	205	
Val	Val	Gly	Ser	Met	Pro	Thr	Ala	Gly	Ser	Ala	Gly	Ser	Val	Pro	Glu	210	215	220	
Asn	Leu	Asn	Leu	Phe	Pro	Glu	Pro	Gly	Ser	Lys	Ser	Glu	Glu	Ile	Gly	225	230	235	240
Lys	Lys	Gln	Leu	Ser	Lys	Asp	Ser	Ile	Leu	Ser	Leu	Tyr	Gly	Ser	Gln	245	250	255	
Thr	Pro	Gln	Met	Pro	Thr	Gln	Ala	Met	Phe	Met	Ala	Pro	Ala	Gln	Met	260	265	270	
Ala	Tyr	Pro	Thr	Ala	Tyr	Pro	Ser	Phe	Pro	Gly	Val	Thr	Pro	Pro	Asn	275	280	285	
Ser	Ile	Met	Gly	Ser	Met	Met	Pro	Pro	Pro	Val	Gly	Met	Val	Ala	Gln	290	295	300	
Pro	Gly	Ala	Ser	Gly	Met	Val	Ala	Pro	Met	Ala	Met	Pro	Ala	Gly	Tyr				

305					310					315				320
Met	Gly	Gly	Met	Gln	Ala	Ser	Met	Met	Gly	Val	Pro	Asn	Gly	Met
				325					330				335	
Thr	Thr	Gln	Gln	Ala	Gly	Tyr	Met	Ala	Gly	Met	Ala	Ala	Met	Pro
			340					345					350	
Thr	Val	Tyr	Gly	Val	Gln	Pro	Ala	Gln	Gln	Leu	Gln	Trp	Asn	Leu
		355					360				365			
Gln	Met	Thr	Gln	Gln	Met	Ala	Gly	Met	Asn	Phe	Tyr	Gly	Ala	Asn
	370					375					380			
Met	Met	Asn	Tyr	Gly	Gln	Ser	Met	Ser	Gly	Gly	Asn	Gly	Gln	Ala
385					390				395					400
Asn	Gln	Thr	Leu	Ser	Pro	Gln	Met	Trp	Lys					
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<210> 4077

<211> 684

<212> DNA

<213> Homo sapiens

<400> 4077

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<210> 4078

<211> 194

<212> PRT

<213> Homo sapiens

<400> 4078

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Ser	Met	Arg	Tyr	Leu	Ala	Leu	Met	Val	Ser	Arg	Pro	Val	Leu	Arg	Leu

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                20                25                30
Arg Glu Ile Asn Pro Leu Leu Phe Ser Tyr Val Glu Glu Leu Val Glu
      35                40                45
Ile Arg Lys Leu Arg Gln Asp Ile Leu Leu Met Lys Pro Tyr Phe Ile
      50                55                60
Thr Cys Arg Glu Ala Met Glu Ala Arg Leu Leu Leu Gln Leu Gln Asp
65                70                75                80
Arg Gln His Phe Val Glu Asn Asp Glu Met Tyr Ser Val Gln Asp Leu
      85                90                95
Leu Asp Val His Ala Gly Arg Leu Gly Cys Ser Leu Thr Glu Ile His
      100                105                110
Thr Leu Phe Ala Lys His Ile Lys Leu Asp Cys Glu Arg Cys Gln Ala
      115                120                125
Lys Gly Phe Val Cys Glu Leu Cys Arg Glu Gly Asp Val Leu Phe Pro
      130                135                140
Phe Asp Ser His Thr Ser Val Cys Ala Asp Cys Ser Ala Val Phe His
145                150                155                160
Arg Asp Cys Tyr Tyr Asp Asn Ser Thr Thr Cys Pro Lys Cys Ala Arg
      165                170                175
Leu Ser Leu Arg Lys Gln Ser Leu Phe Gln Glu Pro Gly Pro Asp Val
      180                185                190
Glu Ala

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<210> 4079

<211> 783

<212> DNA

<213> Homo sapiens

<400> 4079

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720

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 nta
 783

<210> 4080
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 4080
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 20 25 30
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 35 40 45
 Glu Ala Leu His Ala Gln Pro Gly Glu Gln Gly Trp Met Gly Leu Lys
 50 55 60
 Arg Ala Gln Pro Ser Pro Glu Arg Thr Leu His Ser Asn Leu Pro Gln
 65 70 75 80
 Ser Trp Gly Lys His Glu Gly Cys Pro Ser Thr Glu Val Asn Pro Gly
 85 90 95
 His Ala Arg Thr Lys
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<210> 4081
 <211> 645
 <212> DNA
 <213> Homo sapiens

<400> 4081
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 180
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 300
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 645

<210> 4082
 <211> 215
 <212> PRT
 <213> Homo sapiens

<400> 4082

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Val Arg Pro Val Gln Asn Leu Ala Leu Gly Lys Glu Glu Leu Ile Gly
      35              40              45
Thr Met Glu Gln Ile Phe Met Asn Val Ala Ile Phe Glu Asp Glu Val
      50              55              60
Phe Ala Gly Val Thr Thr His Gln Glu Leu Phe Pro His Ser Leu Leu
      65              70              75              80
Ser Val Ile Ala Asn Phe Ile Pro Phe Ser Asp His Asn Gln Ser Pro
      85              90              95
Arg Asn Met Tyr Gln Cys Gln Met Gly Lys Gln Thr Met Gly Phe Pro
      100             105             110
Leu Leu Thr Tyr Gln Asp Arg Ser Asp Asn Lys Leu Tyr Arg Leu Gln
      115             120             125
Thr Pro Gln Ser Pro Leu Val Arg Pro Ser Met Tyr Asp Tyr Tyr Asp
      130             135             140
Met Asp Asn Tyr Pro Ile Gly Thr Asn Ala Ile Val Ala Val Ile Ser
      145             150             155             160
Tyr Thr Gly Tyr Asp Met Glu Asp Ala Met Ile Val Asn Lys Ala Ser
      165             170             175
Trp Glu Arg Gly Phe Ala His Gly Ser Val Tyr Lys Ser Glu Phe Ile
      180             185             190
Asp Leu Ser Glu Lys Ile Lys Gln Gly Asp Ser Ser Leu Val Phe Gly
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Ile Lys Pro Gly Asp Pro Arg
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<210> 4083
 <211> 2983
 <212> DNA
 <213> Homo sapiens

<400> 4083

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 360

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<211> 362

<212> PRT

<213> Homo sapiens

<400> 4084

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<211> 2673
<212> DNA
<213> Homo sapiens
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<211> 789

<212> PRT

<213> Homo sapiens

<400> 4086

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			20					25					30		
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3274

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 675 680 685
 Tyr Ile Met Ala Met Ala Met Gln Met Ala Thr Phe Ala Ile Asn Tyr
 690 695 700
 Lys Gly Pro Pro Phe Met Glu Ser Leu Pro Glu Asn Lys Pro Leu Val
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<210> 4087

<211> 959

<212> DNA

<213> Homo sapiens

<400> 4087

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<211> 319

<212> PRT

<213> Homo sapiens

<400> 4088

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Gly	Gly	Gly	Phe	Leu	Thr	Ser	Cys	Glu	Ala	Glu	Leu	Gln	Glu	Leu	Met
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Lys	Gln	Ile	Asp	Ile	Met	Val	Ala	His	Lys	Lys	Ser	Glu	Trp	Glu	Gly
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Arg	Thr	His	Ala	Leu	Glu	Thr	Cys	Leu	Lys	Ile	Arg	Glu	Gln	Glu	Leu
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Lys	Ser	Leu	Arg	Ser	Gln	Leu	Asp	Val	Thr	His	Lys	Glu	Val	Gly	Met
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Ile	Gln	His	Leu	Ser	Ser	Lys	Leu	Glu	Arg	Ala	Asn	Asp	Thr	Ile	Cys
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 <211> 511
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 <213> Homo sapiens

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<210> 4090
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 <212> PRT
 <213> Homo sapiens

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 Ser Asn Phe Phe Trp Arg Asp Glu Ser Phe Asp Leu Thr Leu Arg Ile
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 Gly Leu Lys Pro Phe Glu Arg Thr Lys Glu Ile Glu Ser Ala Phe Leu
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 <212> DNA
 <213> Homo sapiens

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<210> 4092

<211> 146

<212> PRT

<213> Homo sapiens

<400> 4092

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Ile Trp Arg Lys Glu Pro Arg Met Val Cys Thr Arg Lys Thr Lys Thr
 50           55           60
Leu Val Ser Thr Cys Val Ile Leu Ser Gly Met Thr Asn Ile Ile Cys
 65           70           75           80
Leu Leu Tyr Val Gly Trp Val Thr Asn Tyr Ile Ala Ser Val Tyr Val
 85           90           95
Arg Gly Gln Glu Pro Ala Pro Asp Lys Lys Leu Glu Glu Asp Lys Gly
100           105           110
Asp Thr Leu Lys Ile Ile Glu Arg Leu Asp His Leu Glu Asn Val Ile
115           120           125
Lys Gln His Ile Gln Gly Tyr Arg Arg Asn Phe Ser Leu Leu Asn Val
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Ser Asn
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<210> 4093

<211> 1519

<212> DNA

<213> Homo sapiens

<400> 4093

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120
gaggaaaaga ggccggggcg cgctgggggg tgagagcatg agggaggccg gggggggctg
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240
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360
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420
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480
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540
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600
tatctggatc cagctgtaac caggaagaaa ttcagacggc gtgttcaaga atctacacaa
660
gtgctaagag aactggaaat ttctttaaga actaaccaca ttggatgggt cagagaattt
720

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ctgaatgaag aaaacaaagg tcttgatggt ctagtggaat atctctcatt tgcacagtac
 780
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 840
 aagccctgga gtaggtccat cgaggacctg cacagaggga gcaacctgcc ctcacctgtg
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 1020
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<210> 4094

<211> 391

<212> PRT

<213> Homo sapiens

<400> 4094

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His	Asn	Val	Pro	Leu	Lys	Leu	Pro	Met	Pro	Glu	Pro	Gly	Glu	Leu	Glu
			20					25					30		
Glu	Arg	Phe	Ala	Ile	Val	Leu	Asn	Ala	Met	Asn	Leu	Pro	Pro	Asp	Lys
		35					40					45			
Ala	Arg	Leu	Leu	Arg	Gln	Tyr	Asp	Asn	Glu	Lys	Lys	Trp	Glu	Leu	Ile
	50					55					60				
Cys	Asp	Gln	Glu	Arg	Phe	Gln	Val	Lys	Asn	Pro	Pro	His	Thr	Tyr	Ile
65					70					75				80	
Gln	Lys	Leu	Lys	Gly	Tyr	Leu	Asp	Pro	Ala	Val	Thr	Arg	Lys	Lys	Phe
				85					90					95	
Arg	Arg	Arg	Val	Gln	Glu	Ser	Thr	Gln	Val	Leu	Arg	Glu	Leu	Glu	Ile
			100					105					110		
Ser	Leu	Arg	Thr	Asn	His	Ile	Gly	Trp	Val	Arg	Glu	Phe	Leu	Asn	Glu
		115					120					125			
Glu	Asn	Lys	Gly	Leu	Asp	Val	Leu	Val	Glu	Tyr	Leu	Ser	Phe	Ala	Gln
	130					135					140				
Tyr	Ala	Val	Thr	Phe	Asp	Phe	Glu	Ser	Val	Glu	Ser	Thr	Val	Glu	Ser


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145          150          155          160
Ser Val Asp Lys Ser Lys Pro Trp Ser Arg Ser Ile Glu Asp Leu His
          165          170          175
Arg Gly Ser Asn Leu Pro Ser Pro Val Gly Asn Ser Val Ser Arg Ser
          180          185          190
Gly Arg His Ser Ala Leu Arg Tyr Asn Thr Leu Pro Ser Arg Arg Thr
          195          200          205
Leu Lys Asn Ser Arg Leu Val Ser Lys Lys Asp Asp Val His Val Cys
          210          215          220
Ile Met Cys Leu Arg Ala Ile Met Asn Tyr Gln Tyr Gly Phe Asn Met
225          230          235          240
Val Met Ser His Pro His Ala Val Asn Glu Ile Ala Leu Ser Leu Asn
          245          250          255
Asn Lys Asn Pro Arg Thr Lys Ala Leu Val Leu Glu Leu Leu Ala Ala
          260          265          270
Val Cys Leu Val Arg Gly Gly His Glu Ile Ile Leu Ser Ala Phe Asp
          275          280          285
Asn Phe Lys Glu Val Cys Gly Glu Lys Gln Arg Phe Glu Lys Leu Met
          290          295          300
Glu His Phe Arg Asn Glu Asp Asn Asn Ile Asp Phe Met Val Ala Ser
305          310          315          320
Met Gln Phe Ile Asn Ile Val Val His Ser Val Glu Asp Met Asn Phe
          325          330          335
Arg Val His Leu Gln Tyr Glu Phe Thr Lys Leu Gly Leu Asp Glu Tyr
          340          345          350
Leu Asp Lys Leu Lys His Thr Glu Ser Asp Lys Leu Gln Val Gln Ile
          355          360          365
Gln Ala Tyr Leu Asp Asn Val Phe Asp Val Gly Ala Leu Leu Glu Asp
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Ala Glu Thr Lys Asn Ala Ala
385          390

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<210> 4095
 <211> 253
 <212> DNA
 <213> Homo sapiens

<400> 4095
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 120
 agagagatca agtagcatcc ccagcgaaat ctgaggcctc tggaggcgcc tgtgcacgtg
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 tgtctggaag tgtgtgtcca ggcagcatat ctgcatgtgt gtgcctgtcc agacagcata
 240
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 253

<210> 4096
 <211> 83
 <212> PRT
 <213> Homo sapiens

<400> 4096

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Met Gly Gly Gly Glu Gln Ala Ser Ala Gly Arg Val Pro Lys Arg Gln
 1           5           10           15
Pro Arg Glu Gln Gly Gln Ile Val Gly Gly Gly Phe Ser Ser Thr Val
           20           25           30
Gln Val Arg Lys Leu Arg Leu Lys Arg Asp Gln Val Ala Ser Pro Ala
           35           40           45
Lys Ser Glu Ala Ser Gly Gly Ala Cys Ala Arg Val Ser Gly Ser Val
           50           55           60
Cys Pro Gly Ser Ile Ser Ala Cys Val Cys Leu Ser Arg Gln His Ile
65           70           75           80
Cys Ala Arg

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<210> 4097

<211> 1385

<212> DNA

<213> Homo sapiens

<400> 4097

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120
cgtgctgtcc tcaattgttc tacaatgagt gccaaatctg ctatcagcaa ggaaattttt
180
gcacctcttg atgaaaggat gctgggagct gtccaagtca agaggaggac aaagaaaaag
240
attcctttct tggcaactgg aggtcaaggc gaatatttaa cttatatctg cctgtcagtg
300
acaaacaaga aaccacaca ggcgtccatc acaaaggcca aacagtttga aggctccaca
360
tcatttggtc ggagatcaca gtggatgctc gagcagcttc gccagggttaa tggatcgat
420
cctaattggg attcggcaga gtttgatttg ttgtttgaaa atgcttttga ccagtgggta
480
gccagcacag cgtcagaaaa atgcaccttc ttccagatcc tccaccatac ctgccagagg
540
tacctcacgg acaggaagcc agagtttatt aactgccaat ccaaattat gggaggaaac
600
agcatcctcc attcagctgc tgacagcgtg accagcgcag tgcagaaggc aagccaggcc
660
ttgaatgagc gtggagagcg attaggccga gcagaggaga agacagaaga cctgaagaac
720
agcgcaccag agtttgaga aactgcgcac aagcttgcca tgaagcaca atgttgagaa
780
actgcctatc ctggtgactc ttcttaagag aaactgaaga gtttggtcag cagtttttac
840
aagaattcgg gacctccgct tgcttctttt ttccaatat ttggacactt agagtgggtt
900
ttgttttttc ttttcagatg ttaatgtgaa agaaagggtg ttgcattttt acatttcctc
960
aatgatcttg ctaataaatg ctacaatagc atcagcttca ttttgggttt ttgcctctc
1020

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ccactgtgtg tatgtgtgta tatgtatggt ttgaatatgt tttctttatt aaaaaatatt
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 1140
 aacatgtatt tttttctctg atattaagca ggaaggcatt ttaatgtggt gacatcagat
 1200
 gttatttttc ctagatgaaa ataaaagtca agcagtgatt agtttcactc actgtcctag
 1260
 ctacacttaa tttgaagatt aaaattctac attgtggaaa acaattgaat ttattgggaa
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 1380
 gttca
 1385

<210> 4098

<211> 258

<212> PRT

<213> Homo sapiens

<400> 4098

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Glu	Pro	Arg	Ala	Leu	Gly	Arg	Val	Pro	Arg	Thr	Gly	Thr	Ala	Gly	Ala
			20					25					30		
Arg	Ala	Arg	Leu	His	Asp	Ser	Leu	Arg	Ala	Val	Leu	Thr	Cys	Ser	Thr
		35				40					45				
Met	Ser	Ala	Lys	Ser	Ala	Ile	Ser	Lys	Glu	Ile	Phe	Ala	Pro	Leu	Asp
	50					55					60				
Glu	Arg	Met	Leu	Gly	Ala	Val	Gln	Val	Lys	Arg	Arg	Thr	Lys	Lys	Lys
65				70					75					80	
Ile	Pro	Phe	Leu	Ala	Thr	Gly	Gly	Gln	Gly	Glu	Tyr	Leu	Thr	Tyr	Ile
			85					90						95	
Cys	Leu	Ser	Val	Thr	Asn	Lys	Lys	Pro	Thr	Gln	Ala	Ser	Ile	Thr	Lys
			100					105					110		
Val	Lys	Gln	Phe	Glu	Gly	Ser	Thr	Ser	Phe	Val	Arg	Arg	Ser	Gln	Trp
		115				120					125				
Met	Leu	Glu	Gln	Leu	Arg	Gln	Val	Asn	Gly	Ile	Asp	Pro	Asn	Gly	Asp
	130					135					140				
Ser	Ala	Glu	Phe	Asp	Leu	Leu	Phe	Glu	Asn	Ala	Phe	Asp	Gln	Trp	Val
145				150					155					160	
Ala	Ser	Thr	Ala	Ser	Glu	Lys	Cys	Thr	Phe	Phe	Gln	Ile	Leu	His	His
			165					170						175	
Thr	Cys	Gln	Arg	Tyr	Leu	Thr	Asp	Arg	Lys	Pro	Glu	Phe	Ile	Asn	Cys
		180					185						190		
Gln	Ser	Lys	Ile	Met	Gly	Gly	Asn	Ser	Ile	Leu	His	Ser	Ala	Ala	Asp
	195					200						205			
Ser	Val	Thr	Ser	Ala	Val	Gln	Lys	Ala	Ser	Gln	Ala	Leu	Asn	Glu	Arg
	210				215						220				
Gly	Glu	Arg	Leu	Gly	Arg	Ala	Glu	Glu	Lys	Thr	Glu	Asp	Leu	Lys	Asn
225				230					235					240	
Ser	Ala	Gln	Gln	Phe	Ala	Glu	Thr	Ala	His	Lys	Leu	Ala	Met	Lys	His
			245					250						255	

Lys Cys

<210> 4099
 <211> 511
 <212> DNA
 <213> Homo sapiens

<400> 4099
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 120
 ttaaacaata aaaaattgta taatggaatt ggatcagggg gttcccaaaa ccccttcac
 180
 tgaggtttgg caattcactg agaaggactc acaggactca gcagatagtc atacttgggg
 240
 ctttgattta ttacatttaa tacagcaaaa agacacaaaag caacatttga gaaaggaaaa
 300
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 360
 agctagcagg atatgcttaa ttccccagc ctcaaatttt gacgacacat gtgcaatgtt
 420
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 480
 acataggcaa cctctcctct ccctcacgcg t
 511

<210> 4100
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 4100
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 20 25 30
 Gly Phe Asp Leu Leu His Leu Ile Gln Gln Lys Asp Thr Lys Gln His
 35 40 45
 Leu Arg Lys Glu Lys Val His Val Ser Lys Ser Gly Gly Ser Gln Ala
 50 55 60
 Gln Ala Thr Gly Val Ile Ser Cys Val Ala Ser Arg Ile Cys Leu Ile
 65 70 75 80
 Pro Pro Ala Ser Asn Phe Asp Asp Thr Cys Ala Met Leu Ser Thr Leu
 85 90 95
 Pro Glu Phe His
 100

<210> 4101
 <211> 536
 <212> DNA
 <213> Homo sapiens

<400> 4101

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 120
 ccaggaaaga tggcacacgg cagacgacga caggaaggac acctgctccc cacccttccc
 180
 gggaccccg ccatgtgcaaa attcgagctg gggctctgcag ctgcttggag agaccaggg
 240
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 300
 cgcttggta ctccccgcgc ccccatgca ggcagtggag gggaggacac gcaggaggac
 360
 cagacgctaa aggtgtaaac gggcagccgt ggcactctc acctctcaat aaataagata
 420
 aataactaaa taaataaaca actaaataaa gacatgaagg aatggatgca gagacgtgaa
 480
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 536

<210> 4102

<211> 106

<212> PRT

<213> Homo sapiens

<400> 4102

Met	Cys	Leu	Leu	Ser	Trp	Thr	Arg	Ile	Ala	Val	Trp	Gly	Pro	Ser	Ala
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Arg	Val	Cys	Thr	Arg	Tyr	Lys	Ile	Gln	Glu	Arg	Trp	His	Thr	Ala	Asp
			20					25					30		
Asp	Asp	Arg	Lys	Asp	Thr	Cys	Ser	Pro	Pro	Phe	Pro	Gly	Pro	Arg	His
			35				40					45			
Val	Gln	Asn	Ser	Ser	Trp	Gly	Leu	Gln	Leu	Leu	Gly	Glu	Thr	Gln	Gly
	50					55					60				
Leu	Leu	Leu	His	Ser	Leu	Gln	Gly	Leu	Ser	Arg	Gln	Arg	Pro	Trp	Gly
65					70					75				80	
Gly	Glu	Ala	Pro	Ala	Trp	Ser	Leu	Pro	Ala	Pro	Pro	Met	Gln	Ala	Val
			85						90					95	
Glu	Gly	Arg	Thr	Arg	Arg	Arg	Thr	Arg	Arg						
			100					105							

<210> 4103

<211> 3040

<212> DNA

<213> Homo sapiens

<400> 4103

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 120
 gaggaggaag gcggtgacga gtctgacctg agttcggaat ccagcattaa gaagaaatct
 180
 caagaggaaa ggaaagaccg acagtccctg gataagccag ccaggaaaag gaggcggaga
 240

agtagaaaga agcccagcgg tgcctcgggt tctgagtcgt ataagtcac tgcaggaagc
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 2580
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 2700
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 2820
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 2940
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<210> 4104

<211> 978

<212> PRT

<213> Homo sapiens

<400> 4104

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Ser	Glu	Ala	Asp	Arg	Ala	Gln	Lys	Met	Asp	Gly	Glu	Ser	Glu	Glu	Glu
		20						25					30		
Gln	Glu	Ser	Val	Asp	Thr	Gly	Glu	Glu	Glu	Gly	Gly	Asp	Glu	Ser	
		35				40					45				
Asp	Leu	Ser	Ser	Glu	Ser	Ser	Ile	Lys	Lys	Lys	Ser	Gln	Glu	Glu	Arg
	50					55					60				
Lys	Asp	Arg	Gln	Ser	Leu	Asp	Lys	Pro	Ala	Arg	Lys	Arg	Arg	Arg	Arg

65					70					75				80	
Ser	Arg	Lys	Lys	Pro	Ser	Gly	Ala	Leu	Gly	Ser	Glu	Ser	Tyr	Lys	Ser
				85					90					95	
Ser	Ala	Gly	Ser	Ala	Glu	Gln	Thr	Ala	Pro	Gly	Asp	Ser	Thr	Gly	Tyr
		100						105					110		
Met	Glu	Val	Ser	Leu	Asp	Ser	Leu	Asp	Leu	Arg	Val	Lys	Gly	Ile	Leu
		115					120					125			
Ser	Ser	Gln	Ala	Glu	Gly	Leu	Ala	Asn	Gly	Pro	Asp	Val	Leu	Glu	Thr
	130					135					140				
Asp	Gly	Leu	Gln	Glu	Val	Pro	Leu	Cys	Ser	Cys	Arg	Met	Glu	Thr	Pro
145					150					155					160
Lys	Ser	Arg	Glu	Ile	Thr	Thr	Leu	Ala	Asn	Asn	Gln	Cys	Met	Ala	Thr
			165						170						175
Glu	Ser	Val	Asp	His	Glu	Leu	Gly	Arg	Cys	Thr	Asn	Ser	Val	Val	Lys
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Trp Glu Val Arg Tyr Glu Pro Asp Ser Lys Ala Phe Gly Val Gly Val

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His Ala Asn Lys Val Lys Val Leu Asp Ala Pro Val Pro Asp Cys Leu		95
	100	105
Gly Val His Cys Asp Phe His Gln Gly Leu Leu Ser Phe Tyr Asn Ala		110
	115	120
Arg Thr Lys Gln Val Leu His Thr Phe Lys Thr Arg Phe Thr Gln Pro		125
	130	135
Leu Leu Pro Ala Phe Thr Val Trp Cys Gly Ser Phe Gln Val Thr Thr		140
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Gly Leu Gln Val Pro Ser Ala Val Arg Cys Leu Gln Lys Arg Gly Ser		160
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<212> DNA

<213> Homo sapiens

<400> 4107

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 50 55 60
 Lys Asn Tyr Gly Met Thr Arg Met Asp Pro Tyr Cys Arg Leu Arg Leu
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 85 90 95
 Pro Arg Trp Asn Lys Val Ile His Cys Thr Val Pro Pro Gly Val Asp
 100 105 110
 Ser Phe Tyr Leu Glu Ile Phe Asp Glu Arg Ala Phe Ser Met Asp Asp
 115 120 125
 Arg Ile Ala Trp Thr His Ile Thr Ile Pro Glu Ser Leu Arg Gln Gly
 130 135 140
 Lys Val Glu Asp Lys Trp Tyr Ser Leu Ser Gly Arg Gln Gly Asp Asp
 145 150 155 160
 Lys Glu Gly Met Ile Asn Leu Val Met Ser Tyr Ala Leu Leu Pro Ala
 165 170 175
 Ala Met Val Met Pro Pro Gln Pro Val Val Leu Met Pro Thr Val Tyr
 180 185 190
 Gln Gln Gly Val Gly Tyr Val Pro Ile Thr Gly Met Pro Ala Val Cys
 195 200 205
 Ser Pro Gly Met Val Pro Val Ala Leu Pro Pro Ala Ala Val Asn Ala

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Pro	Asn	Met	Asp	Gln	Glu	Val	Ile	Arg	Ser	Val	Leu	Glu	Ala	Gln	Arg
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 <212> DNA
 <213> Homo sapiens

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 <213> Homo sapiens

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 Gly Pro Asn Gly Val Trp Thr Leu Leu Gln Lys Gly Arg Ser Val Ser
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 Thr Arg Leu His Glu Gln Lys Leu Val Gln His Val Val Ser Gln Asn
 130 135 140
 Cys Asp Gly Leu His Leu Arg Ser Gly Leu Pro Arg Thr Ala Ile Ser
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 Glu Leu His Gly Asn Met Tyr Ile Glu Val Cys Thr Ser Cys Val Pro
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 180 185 190
 His Arg His Gln Thr Gly Arg Thr Cys His Lys Cys Gly Thr Gln Leu
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 Arg Asp Thr Ile Val His Phe Gly Glu Arg Gly Thr Leu Gly Gln Pro
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Trp	Cys	Met	Thr	Lys	Pro	Pro	Ala	Gly	Gly	Arg	Leu	Tyr	Ile	Val	Asn
			260					265					270		
Leu	Gln	Trp	Thr	Pro	Lys	Asp	Asp	Trp	Ala	Ala	Leu	Lys	Leu	His	Gly
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Ile	Pro	Ala	Tyr	Ser	Arg	Trp	Gln	Asp	Pro	Ile	Phe	Ser	Leu	Ala	Thr
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 Asp Thr Arg Arg Leu Ser Phe Leu Val Ser Tyr Ile Ala Ser Lys Lys
 65 70 75 80
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 145 150 155 160
 Asp Gly Lys Met Ile Lys Asn Glu Val Asp Met Gln Val Leu His Leu
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 Leu Gly Pro Lys Leu Glu Ala Asp Leu Glu Lys Lys Phe Lys Val Ala
 180 185 190
 Lys Ala Arg Leu Glu Glu Thr Asp Arg Arg Thr Ala Lys Asp Val Val
 195 200 205
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 210 215 220
 Arg Gly Glu Ala Leu Lys Phe His Lys Pro Gly Glu Asn Tyr Lys Thr
 225 230 235 240
 Pro Gly Tyr Val Val Thr Pro His Thr Met Asn Leu Leu Lys Gln His
 245 250 255
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 260 265 270
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 275 280 285
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 305 310 315 320
 Met Val Ala Trp Leu Gly Tyr Thr Pro Tyr Lys Val Thr Tyr Ala Ser

			325					330					335					
Asp	Tyr	Phe	Asp	Gln	Leu	Tyr	Ala	Trp	Ala	Val	Glu	Leu	Ile	Arg	Arg			
			340					345					350					
Gly	Leu	Ala	Tyr	Val	Cys	His	Gln	Arg	Gly	Glu	Glu	Leu	Lys	Gly	His			
			355					360					365					
Asn	Thr	Leu	Pro	Ser	Pro	Trp	Arg	Asp	Arg	Pro	Met	Glu	Glu	Ser	Leu			
			370					375					380					
Leu	Leu	Phe	Glu	Ala	Met	Arg	Lys	Gly	Lys	Phe	Ser	Glu	Gly	Glu	Ala			
385				390					395					400				
Thr	Leu	Arg	Met	Lys	Leu	Val	Met	Glu	Asp	Gly	Lys	Met	Asp	Pro	Val			
			405					410					415					
Ala	Tyr	Arg	Val	Lys	Tyr	Thr	Pro	His	His	Arg	Thr	Gly	Asp	Lys	Trp			
			420					425					430					
Cys	Ile	Tyr	Pro	Thr	Tyr	Asp	Tyr	Thr	His	Cys	Leu	Cys	Asp	Ser	Ile			
			435					440					445					
Glu	His	Ile	Thr	His	Ser	Leu	Cys	Thr	Lys	Glu	Phe	Gln	Ala	Arg	Arg			
			450					455					460					
Ser	Ser	Tyr	Phe	Trp	Leu	Cys	Asn	Ala	Leu	Asp	Val	Tyr	Cys	Pro	Val			
465				470					475					480				
Gln	Trp	Glu	Tyr	Gly	Arg	Leu	Asn	Leu	His	Tyr	Ala	Val	Val	Ser	Lys			
			485					490					495					
Arg	Lys	Ile	Leu	Gln	Leu	Val	Ala	Thr	Gly	Ala	Val	Arg	Asp	Trp	Asp			
			500					505					510					
Asp	Pro	Arg	Leu	Phe	Thr	Leu	Thr	Ala	Leu	Arg	Arg	Arg	Gly	Phe	Pro			
			515					520					525					
Pro	Glu	Ala	Ile	Asn	Asn	Phe	Cys	Ala	Arg	Val	Gly	Val	Thr	Val	Ala			
			530					535					540					
Gln	Thr	Thr	Met	Glu	Pro	His	Leu	Leu	Glu	Ala	Cys	Val	Arg	Asp	Val			
545				550					555					560				
Leu	Asn	Asp	Thr	Ala	Pro	Arg	Ala	Met	Ala	Val	Leu	Glu	Ser	Leu	Arg			
			565					570					575					
Val	Ile	Ile	Thr	Asn	Phe	Pro	Ala	Ala	Lys	Ser	Leu	Asp	Ile	Gln	Val			
			580					585					590					
Pro	Asn	Phe	Pro	Ala	Asp	Glu	Thr	Lys	Gly	Phe	His	Gln	Val	Pro	Phe			
			595					600					605					
Ala	Pro	Ile	Val	Phe	Ile	Glu	Arg	Thr	Asp	Phe	Lys	Glu	Glu	Pro	Glu			
			610					615					620					
Pro	Gly	Phe	Lys	Arg	Leu	Ala	Trp	Gly	Gln	Pro	Val	Gly	Leu	Arg	His			
625				630					635					640				
Thr	Gly	Tyr	Val	Ile	Glu	Leu	Gln	His	Val	Val	Lys	Gly	Pro	Ser	Gly			
			645					650					655					
Cys	Val	Glu	Ser	Leu	Glu	Val	Thr	Cys	Arg	Arg	Ala	Asp	Ala	Gly	Glu			
			660					665					670					
Lys	Pro	Lys	Ala	Phe	Ile	His	Trp	Val	Ser	Gln	Pro	Leu	Met	Cys	Glu			
			675					680					685					
Val	Arg	Leu	Tyr	Glu	Arg	Leu	Phe	Gln	His	Lys	Asn	Pro	Glu	Asp	Pro			
			690					695					700					
Thr	Glu	Val	Pro	Gly	Gly	Phe	Leu	Ser	Asp	Leu	Asn	Leu	Ala	Ser	Leu			
705				710					715					720				
His	Val	Val	Asp	Ala	Ala	Leu	Val	Asp	Cys	Ser	Val	Ala	Leu	Ala	Lys			
			725					730					735					
Pro	Phe	Asp	Lys	Phe	Gln	Phe	Glu	Arg	Leu	Gly	Tyr	Phe	Ser	Val	Asp			
			740					745					750					
Pro	Asp	Ser	His	Gln	Gly	Lys	Leu	Val	Phe	Asn	Arg	Thr	Val	Thr	Leu			